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Environmental Impact Report

NEIMAN-MARCUS DEPARTMENT STORE

EE 77.257

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DRAFT
ENVIRONMENTAL IMPACT REPORT

NEIMAN-MARCUS DEPARTMENT STORE

EE77.257
October 1978

Public Comment Period: 13 October to 14 November 1978

Public Hearing: 14 November 1978

Written comments should be sent to the Environmental Review Officer, 45 Hyde Street, San Francisco, CA 94102

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store : draft
1978.

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CHAPTER I
SUMMARY

A. PROJECT DESCRIPTION

A Neiman-Marcus specialty retail store is proposed for the southeast corner of the Geary and Stockton street intersection on Union Square in San Francisco. The site is currently occupied by two buildings, the Landmark City of Paris building and the 133-157 Geary Street building. These two structures would be demolished prior to construction of the proposed project. The Rotunda and art glass dome of the City of Paris building would be dismantled, and then incorporated into the design of the proposed project. The proposed building would be a 90-foot-tall rectangular structure, with the Rotunda enclosed within a glass cylinder set into the building's northwest corner. The facade treatment would be a checkerboard pattern of two-foot granite squares, with display windows on Geary and Stockton streets. The building would consist of four floors and a basement with a total floor area of approximately 175,000 square feet.

B. IMPACTS OF THE PROPOSED PROJECT

Implementation of the proposed project would mean demolition of a State Historical Landmark, the City of Paris building; the building is also listed on the National Register of Historic Places.

The proposed project would not conform with the San Francisco Master Plan policy concerning remodeling of older buildings to enhance their original character. The Rotunda would not clearly define a visual terminus of Union Square, and the proposed building facade would contrast with the formal base, midsection and top design of most surrounding buildings. Window placement would contrast with the orderly, symmetrical window placement in other buildings facing Union Square. The building's exterior design would relate to a scale larger than that of the pedestrian environment.

During project construction, the sidewalks on Geary and Stockton streets would be blocked, requiring diversion of pedestrian flows. During operation of the Neiman-Marcus store, pedestrian flows on sidewalks and crosswalks in the immediate project area would worsen. Vehicular traffic into downtown San Francisco would increase slightly, with 780 trips generated on an average Friday and 1,330 trips on a peak Friday.

Noise generated by construction activity during "worst-case" conditions (several pieces of construction equipment operating simultaneously) could cause a 19 dBA increase along Geary Street and a 21 dBA increase along Stockton Street. Under these conditions, it would be difficult to communicate by voice at distances of 3 to 4 feet. Within buildings across Geary Street from the site, an average of 65 to 70 dBA would result (assuming open windows).

The project would create construction employment for approximately 150 people. Permanent employment generated by the project, for a typical year following project completion, is estimated at 450 on an average day and 550 on a peak day. Municipal tax revenues generated by the proposed project are estimated to be $470,000 per year; about $63,000 in payroll taxes would be generated during the construction period.

C. MITIGATION MEASURES

The City of Paris building's Rotunda and art glass dome have been incorporated into the proposed project design, to partially mitigate the loss of that building. The project sponsor would document the building by drawings and photographs.

The City of San Francisco Urban Design Plan suggests several mitigation measures which could be incorporated into the design of the building, including lighter colored granite squares, additional display windows at street level, and greater attention to surface detailing of the proposed building facade. Johnson and Burgee, project architects, have stated reasons why these measures were not incorporated in the building design.

Construction vehicle activity would be scheduled to end prior to 4 p.m. to mitigate traffic impacts during the afternoon peak hour. Because the basement of the existing building extends to the street, a flower stand would be relocated during demolition and construction. Several potential temporary locations have been identified. The most effective measure for improving existing and projected pedestrian circulation after project completion would be to increase the green phases of traffic lights at the Geary Street and Stockton Street crosswalks. Parking and traffic impacts could be further reduced by strategies encouraging shoppers to use public transit modes. Neiman-Marcus has indicated that it would encourage car- and van-pool programs among employees.

To mitigate noise impacts, Neiman-Marcus would specify in its construction contract, that the contractor shall meet San Francisco Noise Ordinance limits on construction equipment noise.

Further, several measures have been incorporated into the proposed project design, to limit operations noise in compliance with the Ordinance.

In consultation with City staff, the project sponsor has developed mitigation measures to meet the special requirements of this building for human safety in case of fire. The building has been designated to operate at energy consumption levels in conformity with state energy conservation standards.

D. ALTERNATIVES

Several alternatives to the proposed project are discussed in this report:

1. No-project, involving continuation of the existing site use.
2. Retention of the City of Paris building for retail use by Neiman-Marcus.
3. Alternative locations for the Neiman-Marcus store.
4. Alternative use for the proposed site.
5. Alternative design for the proposed building.

CHAPTER II
PROJECT DESCRIPTION

A. OBJECTIVE

Neiman-Marcus, a division of Carter Hawley Hale Stores, Inc., proposes to build a specialty retail store in San Francisco. The firm intends to become part of the business environment of San Francisco, specifically the area adjacent to Union Square, which is one of the main shopping centers in the City and the location of several large retail stores. The proposed store would offer a variety of departments, including designer fashions, jewelry, furs, boutiques, leather goods, cosmetics, a beauty salon, and a restaurant. This store would be comparable to other branches of Neiman-Marcus' nationwide operation conveying the same image of serving middle and upper-middle income households. The firm of Johnson/Burgee has been retained to design the building.

B. LOCATION

The proposed project would be located in the City and County of San Francisco (Figure 1, page 5), at the southeast corner of the Geary and Stockton Street intersection on Union Square (Figure 2, page 6). The building would occupy Assessor's Block 313, lots 14 and 15. Lot 14 measures 137.5 feet by 137.5 feet, and lot 15 measures 112.5 feet by 137.5 feet, with the smaller dimension facing Geary Street. The total area of the two lots is 34,400 square feet, to be occupied entirely by the proposed structure. The street elevations range from 50.5 feet in the northwest corner to 45 feet and 44.1 feet in the northeast and southwest corners, respectively.[1] Existing buildings on the site are the City of Paris building on the corner of Stockton and Geary streets and the 133-157 Geary Street building.

C. DESIGN

The proposed building would be a rectangular structure, 90 feet high, with a glass cylinder enclosing the Rotunda from the present City of Paris building set within the northwest corner.

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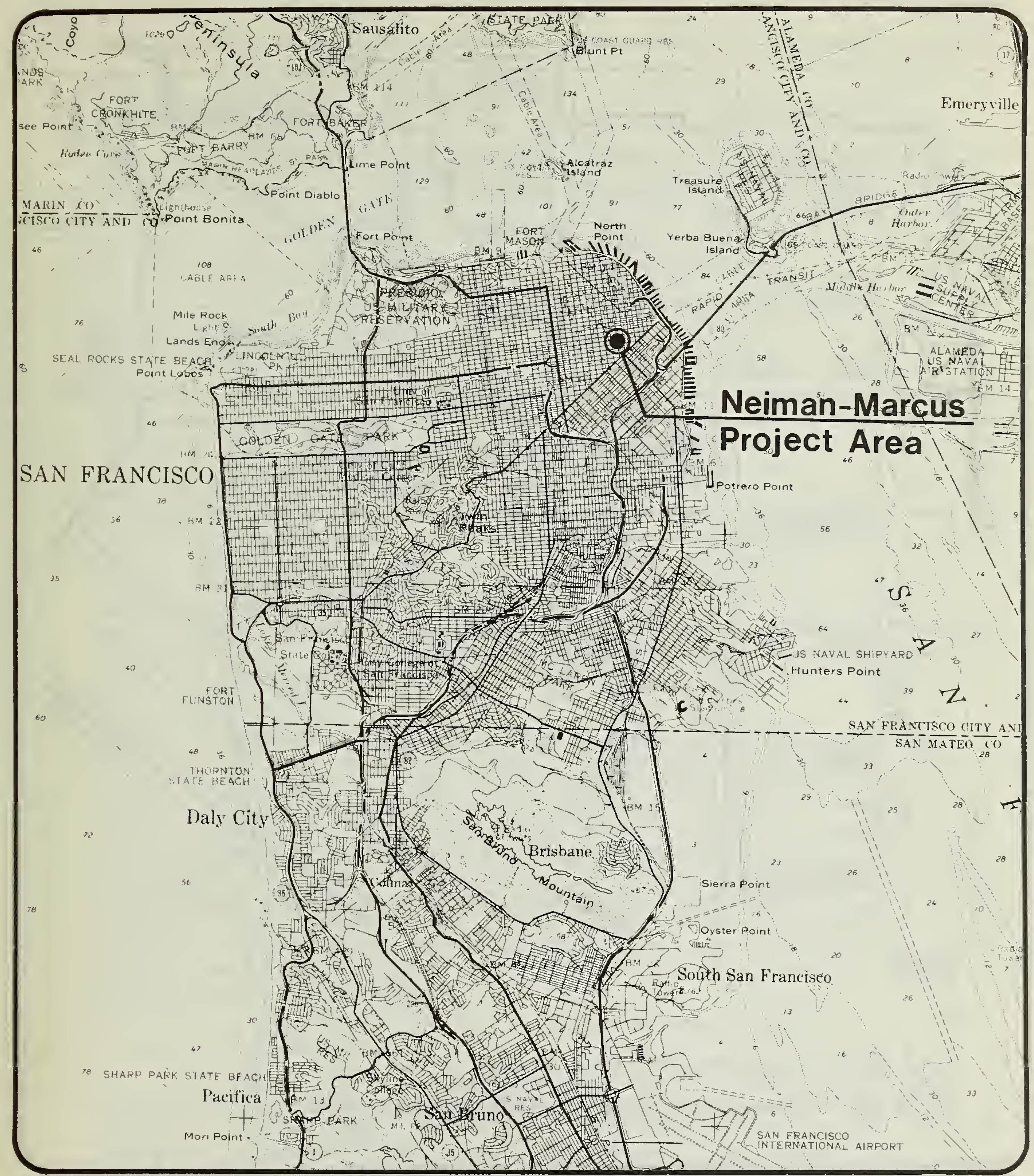
[1] City datum elevations. 0 City datum is 8.6 feet above mean sea level. All elevations in this report are City datum.



Regional Location Map

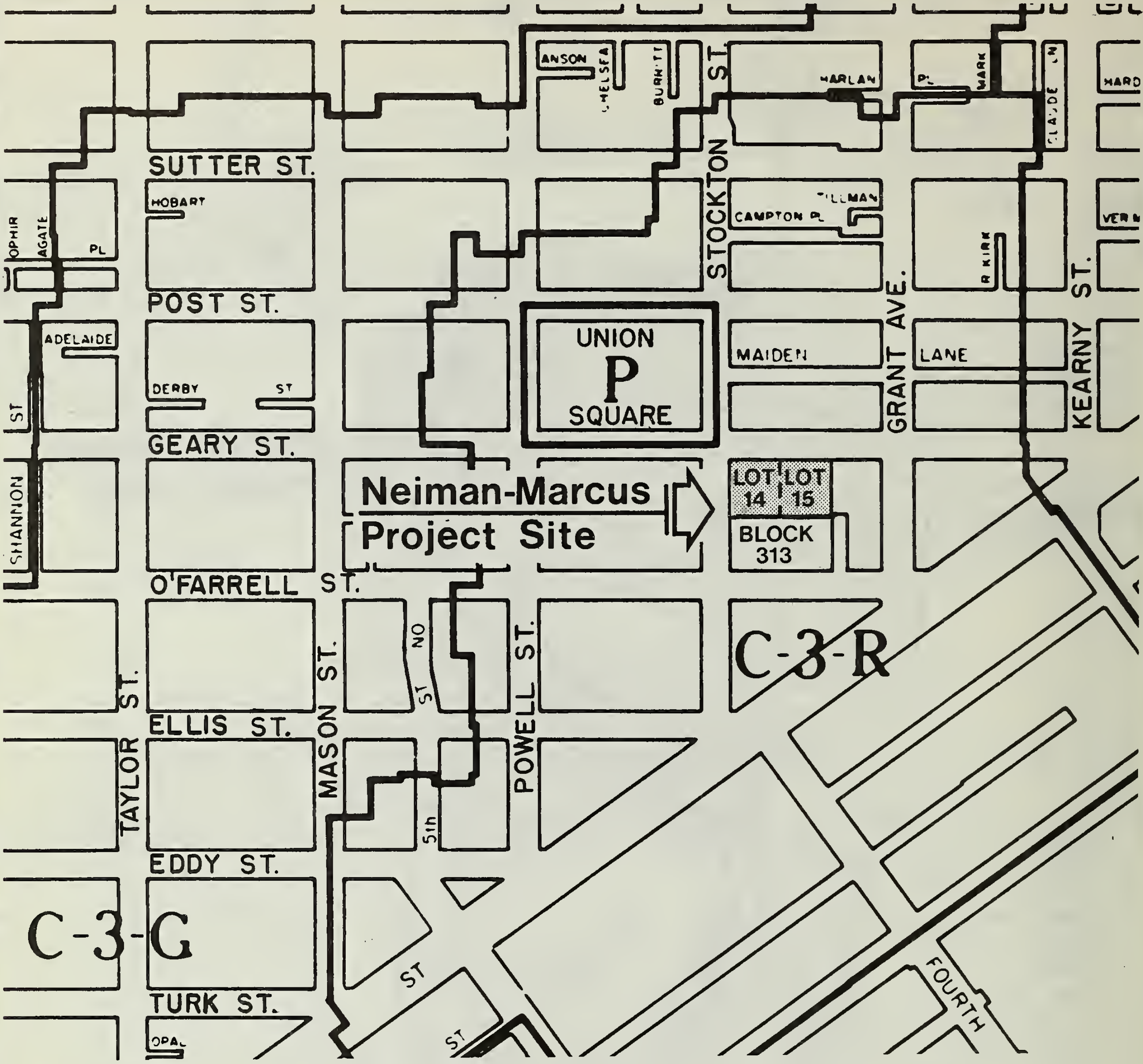
Source: U.S. Geological Survey

0 ½ 1 2 4

Scale Miles

NORTH

Figure No.1



KEY

P = Public Use District
C-3-R = Downtown Retail District
C-3-G = Downtown General Commercial District

Site Location Map (with zoning indicated)

Source: San Francisco Zoning Map

Figure No. 2

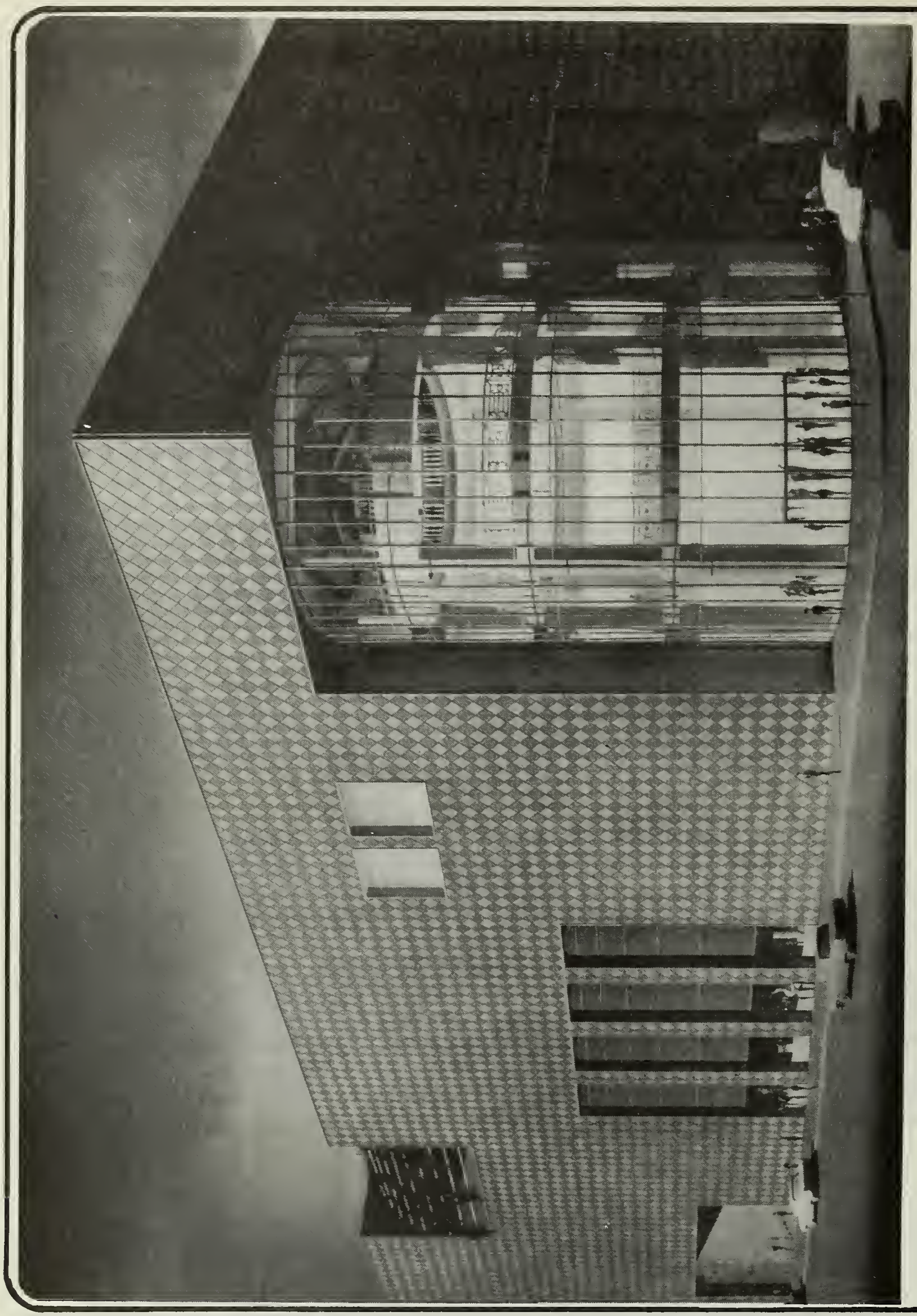
The section from the top of the Rotunda to the roofline, would be a conventional corner (Figure 3, page 8). A curved trellis would be set in the roof and north wall near the building's east end. A group of four tall windows starting near the ground would dominate the north wall, accompanied by two smaller square windows set high in the wall. The west wall would have two tall windows of the same proportions as those on the north wall.

The facade would consist of a checkerboard pattern of two-foot granite squares at an angle of 45° to the horizontal and vertical, in contrasting colors of pale pink and brownish red (Figure 3, page 8). The sidewalk surrounding the store would be repaved in granite compatible with the design and color of the building facade. Figure 4, page 9, shows the elevations of the exterior of the proposed building as seen from Stockton and Geary streets, respectively. Figure 5, page 10, shows a longitudinal section through the proposed store. Figure 6, page 11, shows the proposed building in the existing Union Square environment. The building would have four floors above grade and one floor below (Figures 7, 8, and 9, pages 12, 13, and 14). Total floor area would be 175,000 square feet, of which about 137,000 square feet or 78% would be retail sales area; the proposed restaurant would occupy approximately 5,500 square feet. The basement would be occupied by service functions and a storage area; the southeast corner of the basement would contain docking facilities for three trucks (Figure 7, page 12).

The store would be accessible from the northeast corner of the building on Geary and through the Rotunda on the northwest corner at Geary and Stockton. The Rotunda would be retained from the City of Paris building which currently occupies part of the project site. It would be an open, four-story shaft with walkways and railings on each floor, topped by an antique, art glass dome[1] (Figures 10, 11, and 12, pages 15, 16, and 17) protected by a skylight. The proposed store would also contain an atrium, measuring 37 feet by 24 feet, located in the center of the proposed building, above the escalators. The trellis in the east corner of the northern facade (Figure 3, page 8) would be covered with planting and would admit natural light.

---

[1] Art glass, as distinguished from stained glass which is primarily translucent, is a glass that is more opaque, iridescent, and reflective. These particular properties require special handling to achieve the optimum potential of the glass, and the form found its fullest flowering in the Art Nouveau mode which originated in Germany and was the preponderant art glass style between 1895 and 1910. The experiments of John La Farge and Louis Tiffany, beginning in the 1870s, created art glass in America, specifically for picture windows and domes.

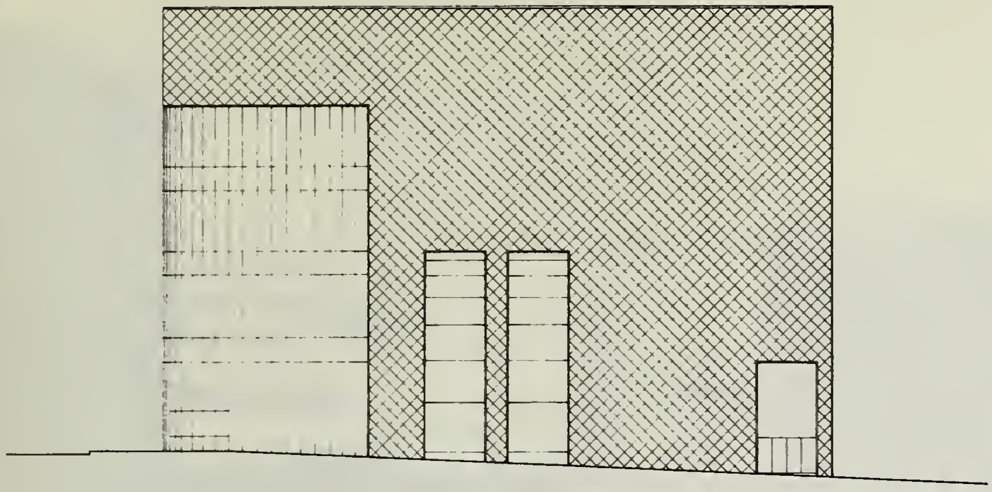


Geary Street
(Looking Southeast)

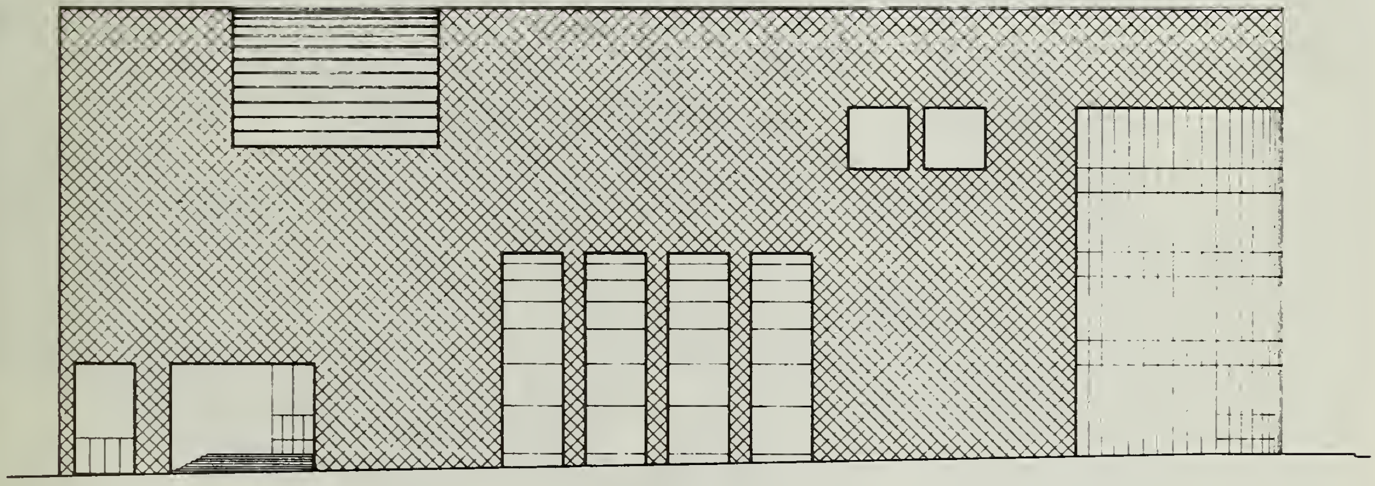
Proposed Neiman-Marcus Building (model photograph)

Building length: 250 ft./width: 137 ft./height: 90 ft.

Figure No. 3



Stockton Street
(West Elevation)

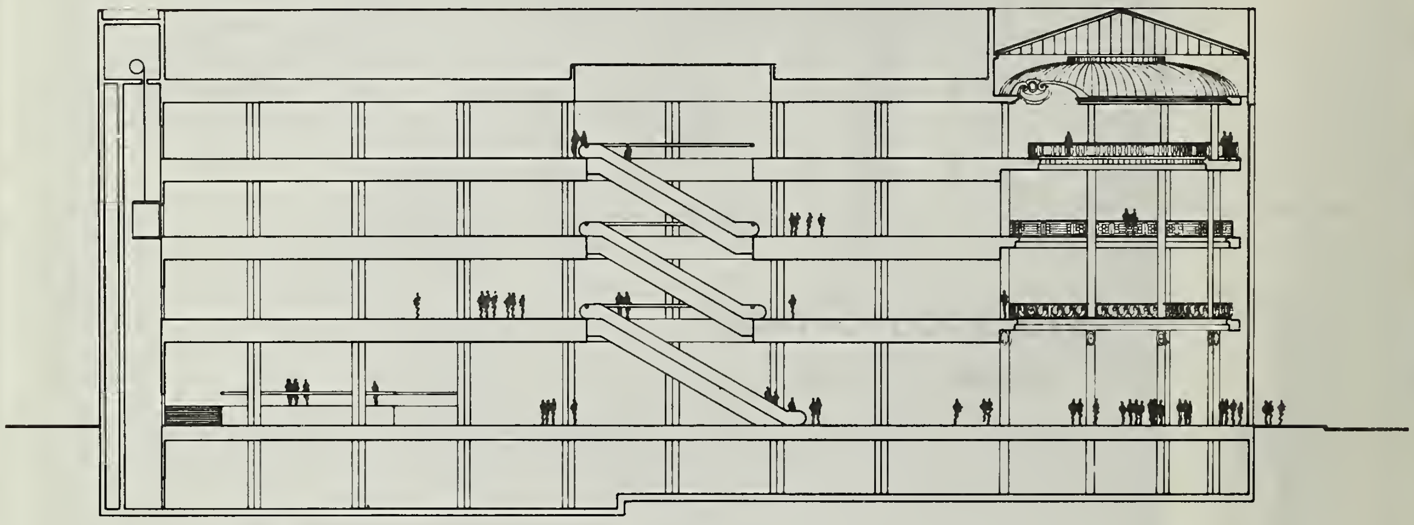


Geary Street
(North Elevation)

Elevations

0 20 40 80
Scale Feet

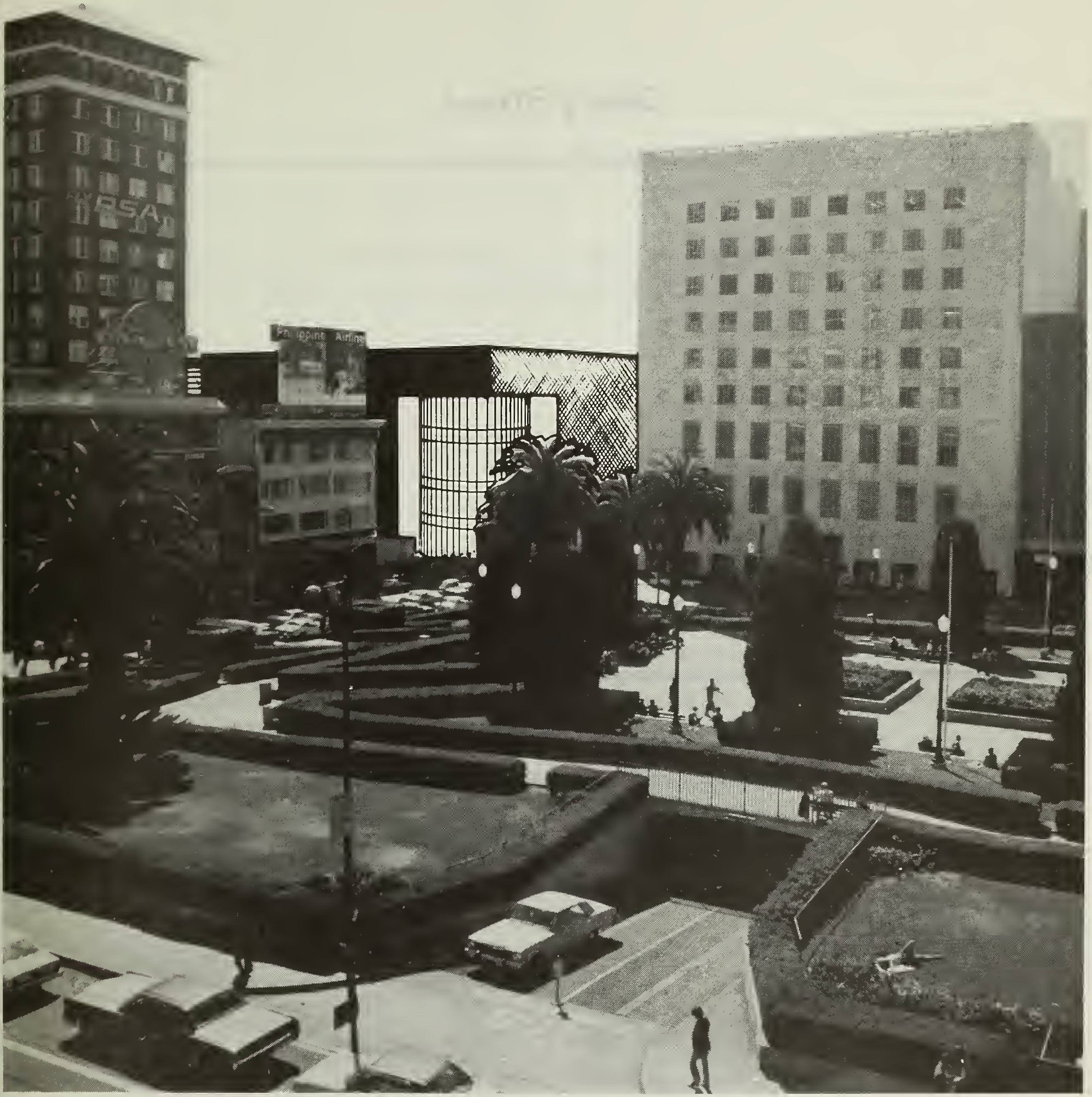
Figure No. 4



Proposed Neiman - Marcus Building

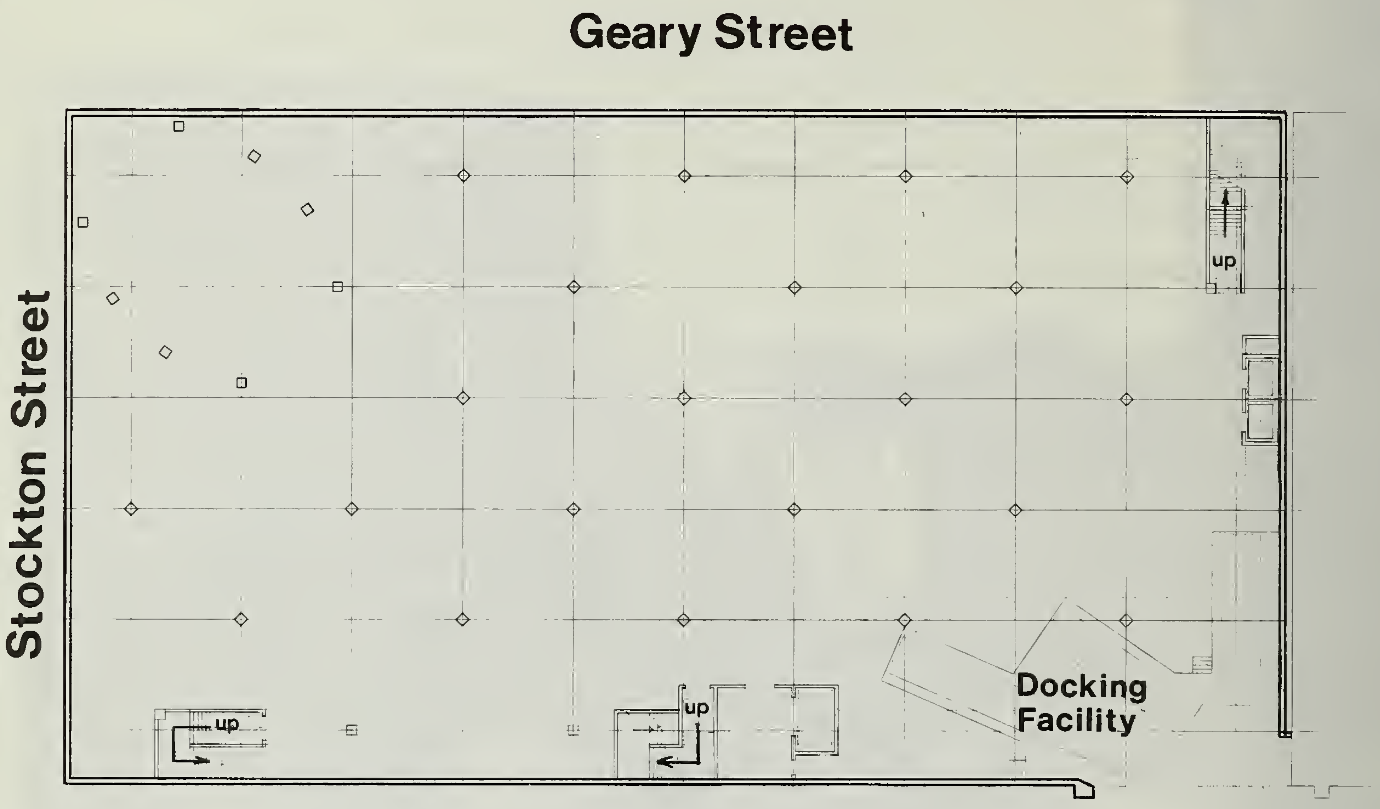
(longitudinal section through structure)

Figure No. 5



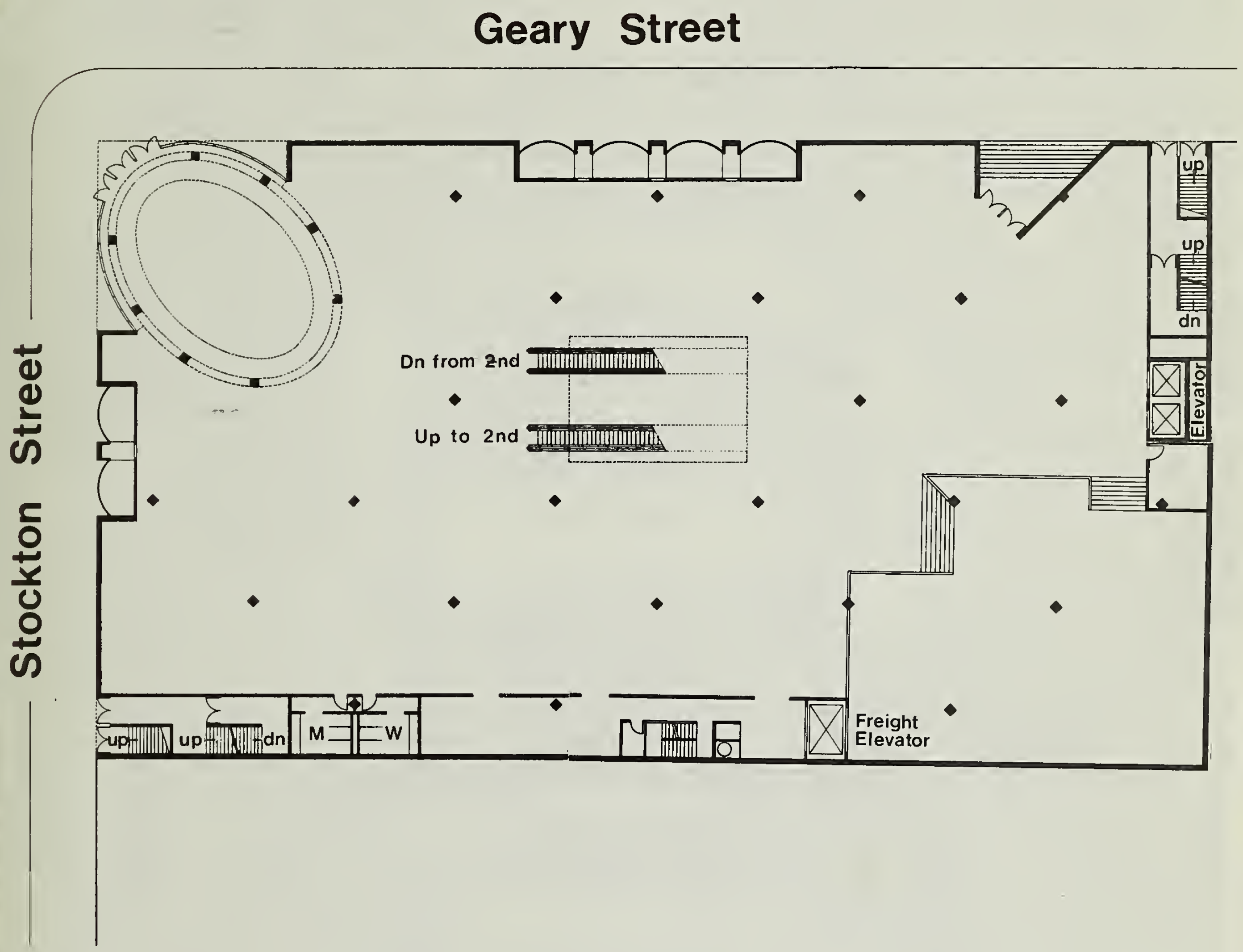
Photomontage: Building facade and rotunda at Geary and Stockton Street intersection

Figure No. 6



Basement Plan

Figure No. 7



Ground Floor Plan

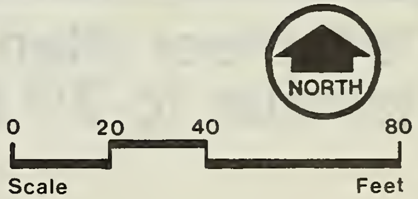
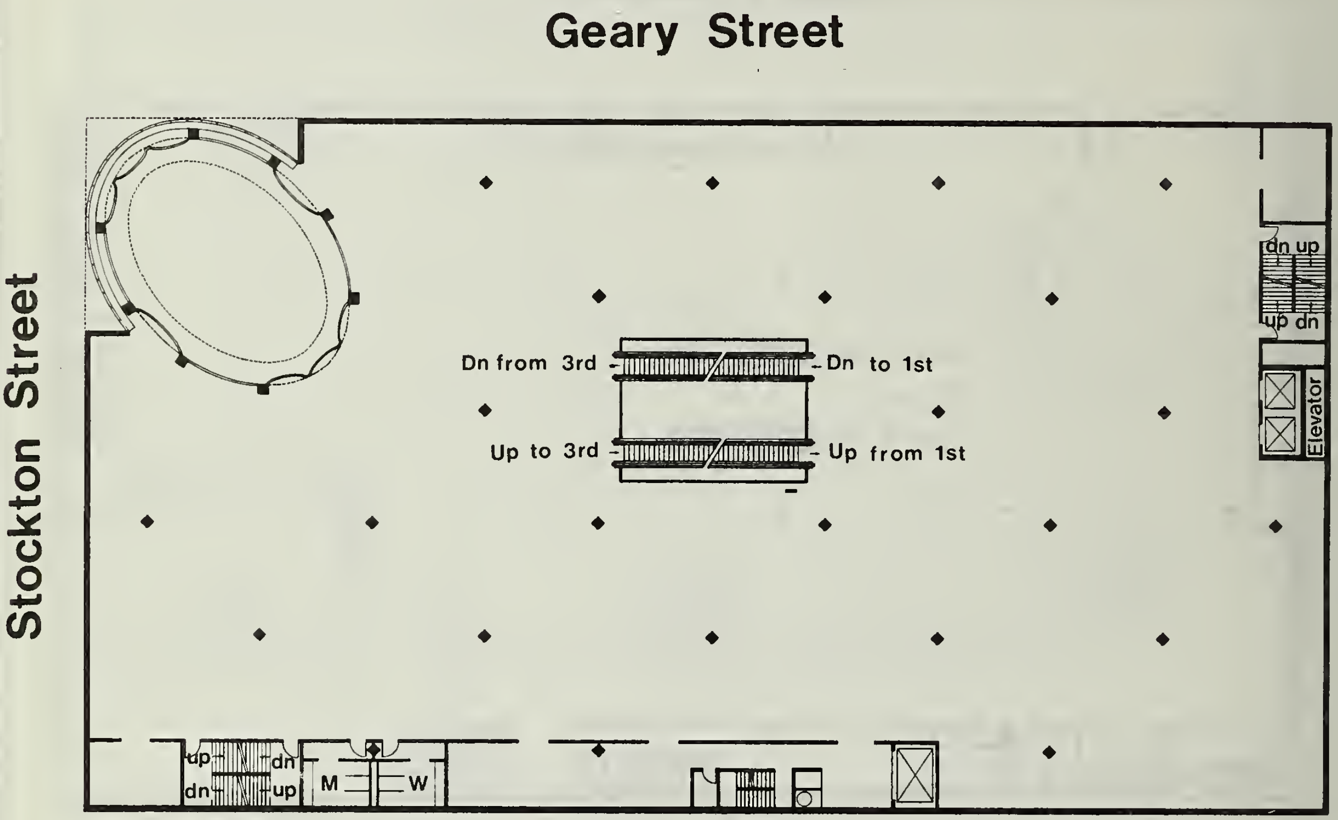


Figure No. 8



2nd Floor Plan
(similar to 3rd & 4th floors)

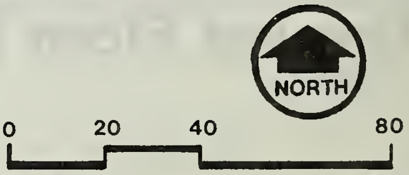
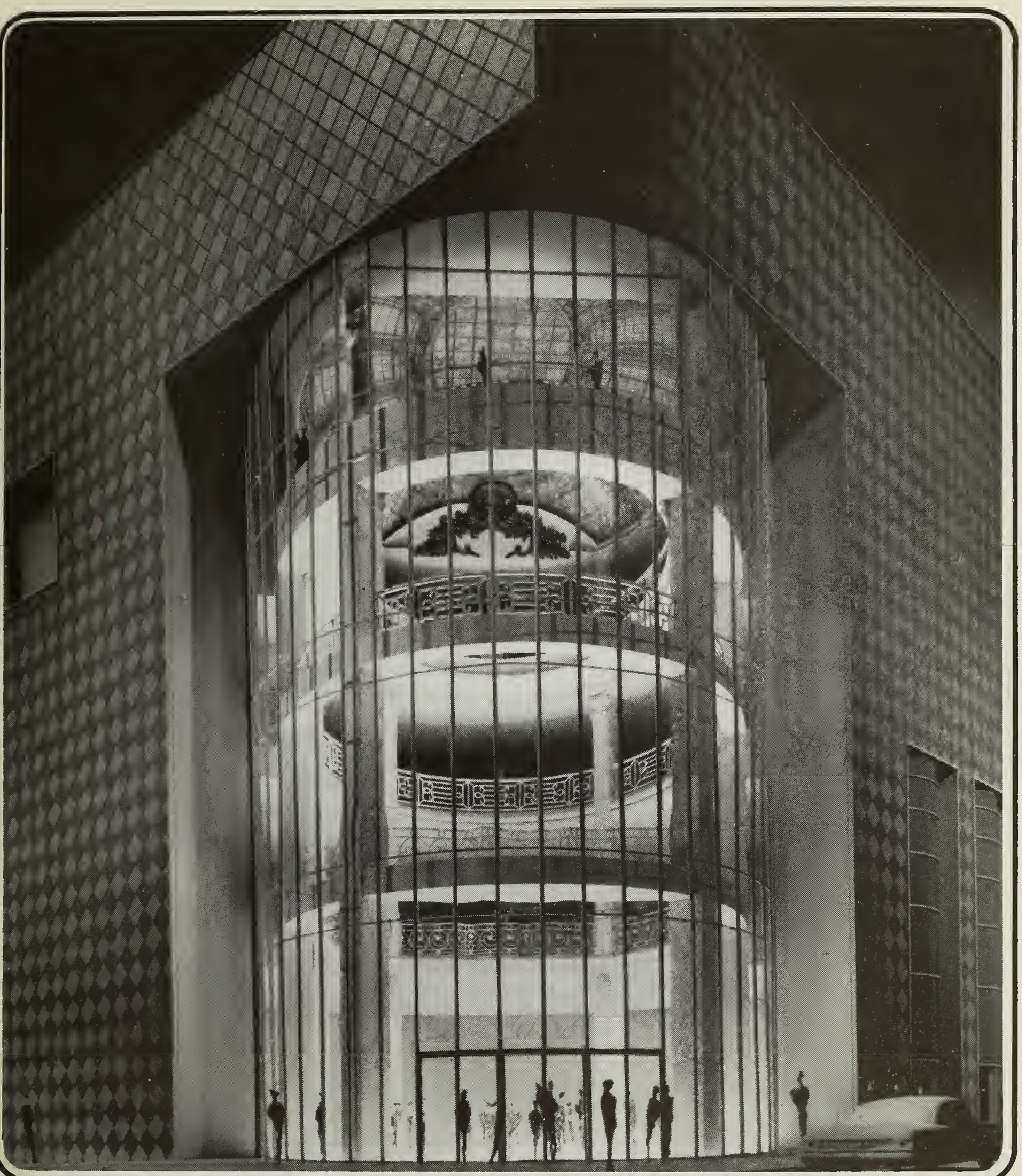
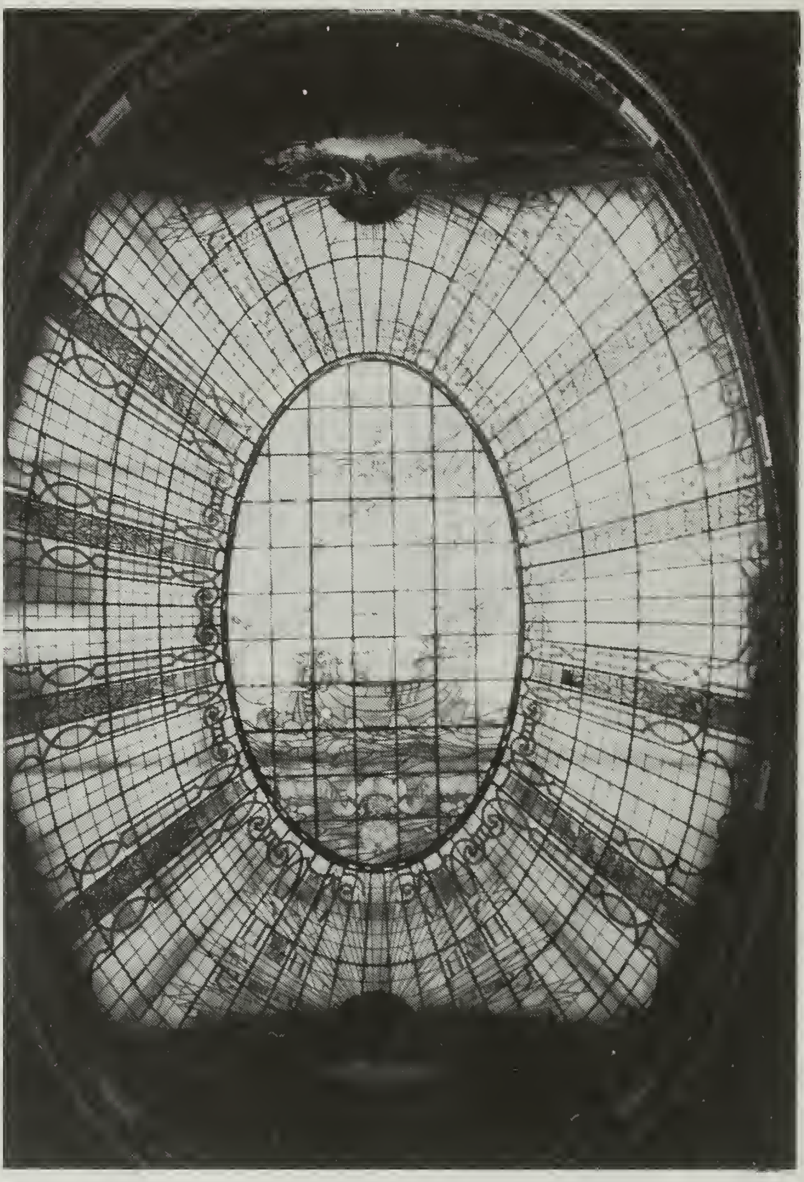


Figure No. 9



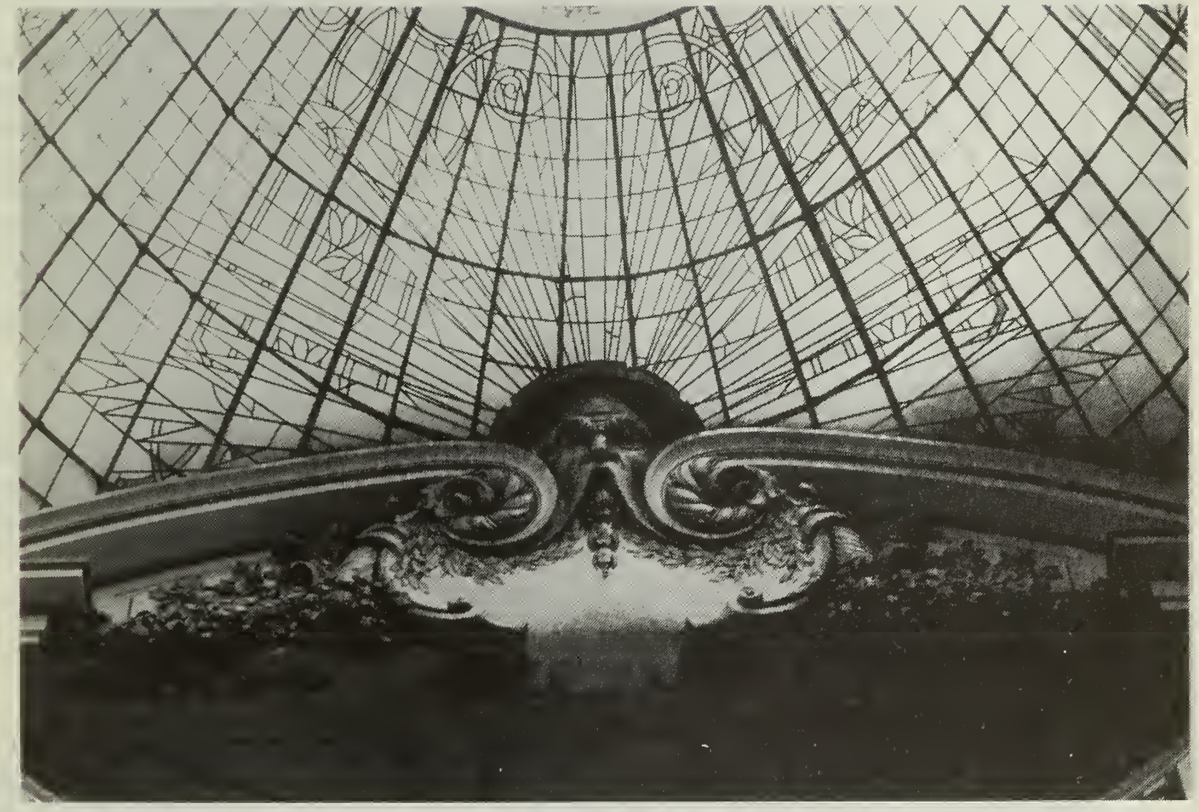
Proposed Neiman-Marcus Building (model photograph, detail of rotunda)

Figure No. 10



Glass Dome Over Rotunda

Figure No. 11



Detail of Rotunda Dome

Figure No.12

D. EXISTING BUILDINGS

The corner of Stockton and Geary streets is currently occupied by the City of Paris building, built in 1896, and placed on the National Register of Historic Places in 1975. This building consists of six floors and a basement with a gross floor area of 130,000 square feet, each floor above grade averaging 18,000 square feet. The building is currently empty, and would be demolished to make way for the proposed project, with the exception of the Rotunda and art glass dome which would be retained. The Rotunda is located in the center of the existing building and extends upward through four floors; it is topped with an art glass dome and a skylight. The dome would be dismantled by hand, each piece catalogued as to its position and stored for later incorporation in the proposed building. The work would be performed by craftsmen skilled in stained glass art work. Demolition of the existing building would begin after completion of dismantling the dome and Rotunda.

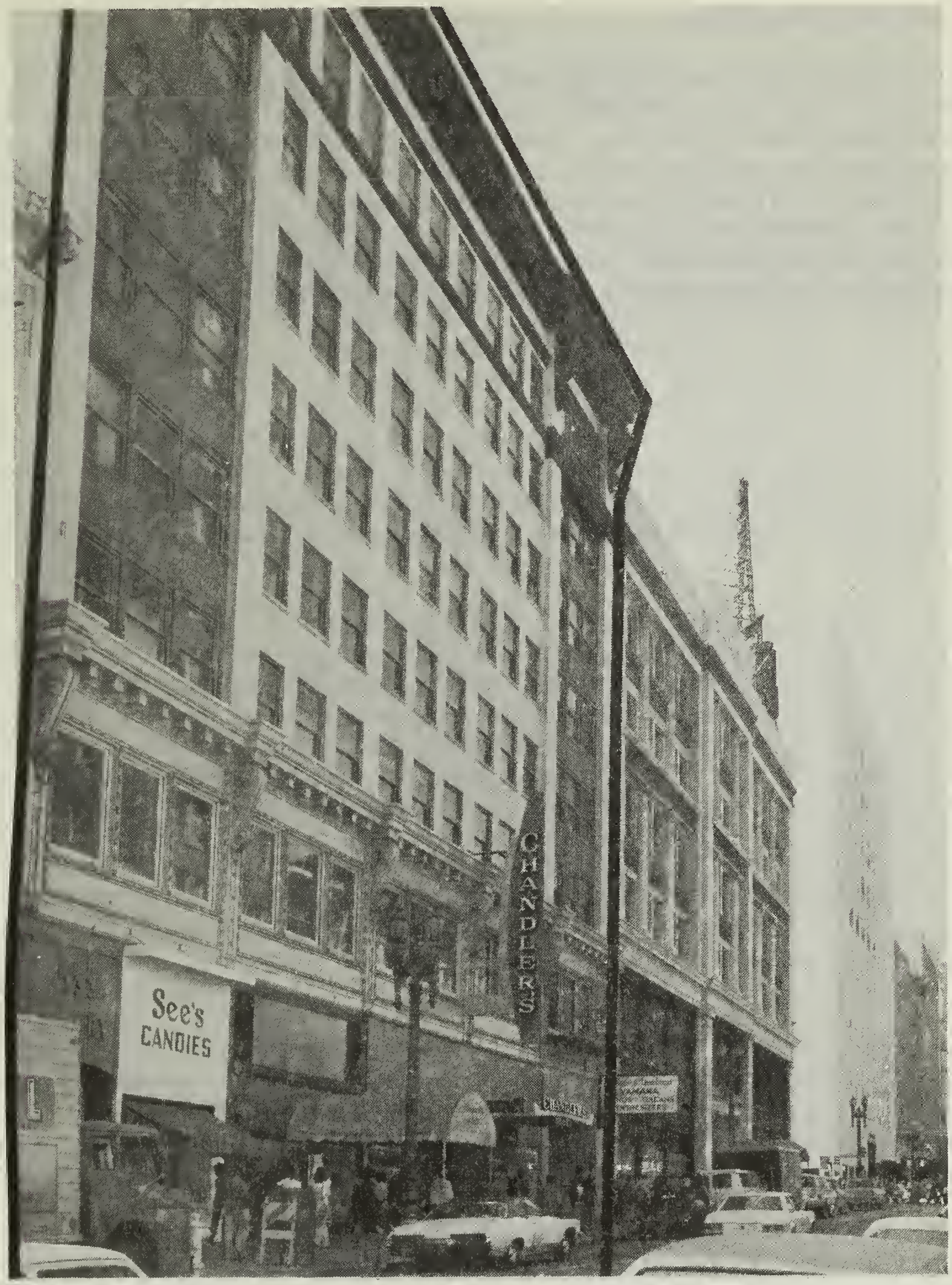
In addition, the building on lot 15, 133-157 Geary Street (Figure 13, page 19), built in 1909, would be demolished. The building is partially occupied by four tenants. It consists of eight floors, and a partial ninth, as well as a basement; total gross floor area is approximately 112,000 square feet.

E. PROPOSED SCHEDULING AND COST

Following certification by the San Francisco City Planning Commission of the Final Environmental Impact Report and granting of the required permits, removal of the art glass dome and demolition of the existing buildings would commence. Dome removal would take approximately 30 days, and 90 days would be required to complete the demolition. Proposed construction of the new building is estimated to take 16 months from the time demolition is complete.

The total cost of the proposed project would be approximately 18.5 million dollars, as follows:

Site work	$ 0.1 million
Building cost	11.2
Interior fixtures	4.3
Design and management	2.9
Total	$18.5 million



North Face, 133 to 157
Geary Street Building

Figure No.13

F. REVIEW PROCESS

Applications for building and demolition permits will be submitted to the City before certification of the Final EIR. Prior to granting the permits, the Planning Commission may assume Discretionary Review over the proposed project. The Commission would then evaluate the appropriateness and design of the project, and could approve, approve with conditions (for example, mitigation measures discussed in Chapter V) or disapprove. Disapproval is appealable to the Board of Permit Appeals within 10 days.

CHAPTER III
ENVIRONMENTAL SETTING

A. SITE HISTORY[1]

The City of Paris department store originated aboard ship in 1850, the year Felix and Emile Verdier's La Ville de Paris sailed through the Golden Gate with a cargo of merchandise. The brothers initially sold the cargo directly from the ship, but in 1851, after a return voyage to France, they opened the City of Paris at 152 Kearny Street. The store specialized in fine, imported dry goods from France, a tradition that was to continue through the store's existence. By 1860, the City of Paris store moved to 633-635 Clay Street, between Montgomery and Kearny streets; the firm's management had been expanded with three partners, Adolph Lelievre, Louis Scellier, and the brothers Kaindler.

In 1870 the center of fashionable retail activity had shifted a few blocks to the south and the City of Paris store consequelty moved to the ground floor of the Occidental Hotel at the northeast corner of Sutter and Montgomery streets. Felix Verdier had died prior to the move, but his son, Gaston Verdier, came to San Francisco from Paris to participate in the management of the store. In 1882 the store was relocated again to the southwest corner of Grant Avenue and Geary Street where it remained until 1896, when it moved into the new Spring Valley Water Company headquarters at the corner of Geary and Stockton streets at Union Square (the present City of Paris building site). The store occupied the first and second floors, and the Spring Valley Water Company used the upper four floors for offices.

In the 1906 earthquake and fire, the Spring Valley headquarters suffered severe damage when the inside of the building collapsed, but the facades toward Geary and Stockton streets remained. Three weeks after the earthquake, the City of Paris store reopened in the Walter S. Hobart Mansion where it remained for three years.

The Spring Valley building required complete interior structural reconstruction. Two architects, John Bakewell and Arthur Brown, Jr., assisted by Louis Bourgeois, were commissioned to design the building interior. Bakewell and Brown graduated from the University of

---

[1] Background material for this section includes San Francisco Landmarks Preservation Advisory Board, City of Paris: Case Report, 5 June 1974; Board of Supervisors File F90-74, City of Paris; and Junior League of San Francisco, Inc., Here Today: San Francisco's Architectural Heritage, San Francisco Chronicle Books, 1975.

California at Berkeley in the 1890s and attended the School of Beaux Arts in Paris; Bakewell was a student of Bernard Maybeck. Bakewell and Brown designed a number of neoclassic buildings, including San Francisco's City Hall and the Veterans' War Memorial Building.

The interior redesign of the Spring Valley building included enlarging an existing rotunda (the exact size of this rotunda is not known) into an elliptical shape extending through four floors and crowned with a skylight and art glass dome. The dome featured a representation of the ship "La Ville de Paris," bearing the motto "Fluctuat nec mergitur" ("it floats and does not sink"). A photograph taken immediately after the earthquake indicated that the second floor windows, then as now, were housed differently than those on the upper floors; however, their pre-fire design is not known. Because the Beaux Arts School influence was not reflected in the interior until after the fire, it is probable that the design of the existing second floor also was a product of the reconstruction and, as such, appears to be the major exterior change from the original design of 1896.

When the City of Paris store returned to Geary and Stockton streets in 1909, it occupied the entire building and expanded shortly thereafter into an adjacent structure to the east. Following World War I, the firm expanded further under the leadership of Gaston Verdier's son, Paul. The store took over the D.N.&E. Walter's Company building at the northeast corner of O'Farrell and Stockton streets, which adjoined the store to the south. Subsequently, the City of Paris store occupied this entire building, giving it full-block frontage on Stockton between O'Farrell and Geary streets.

Paul Verdier remained in charge of the firm until his death in 1970, when he was 90 years old. The store closed two years later. In May 1972, Liberty House reopened in the City of Paris building using it as a temporary location until its new store was completed in October 1974, on the former Walter's building site.

Following the reconstruction of the City of Paris building in 1909, the store annually erected a Christmas tree which rose from the main floor into the upper reaches of the Rotunda. For many Bay Area residents, no Christmas season was complete without viewing "the tree" (see Appendix C, page 145).

Carter Hawley Hale Stores, Inc. bought the property in 1970, and later announced plans to demolish the building and erect a branch of the Neiman-Marcus specialty store on the site and that of the adjacent 133-157 Geary Street building, which it acquired in September 1971. The announcement aroused widespread opposition, and on 11 January 1974, the Citizens Committee to Save the City of Paris Building petitioned the Board of Supervisors and the Director of Planning, urging that the building be designated a City Landmark.

The San Francisco Landmarks Preservation Advisory Board conducted a study of the history of the City of Paris, the Verdier family, and the building's architecture. The Landmarks Board submitted a resolution to the City Planning Commission (Resolution 109, adopted by the Landmarks Board, 5 June 1974) recommending Landmark status for the building.

A public hearing held by the City Planning Commission on 11 July 1974 attracted representatives of a number of local organizations who pressed for Landmark designation: The Foundation for San Francisco's Architectural Heritage (Heritage), the Victorian Alliance, the Citizens Committee to Save the City of Paris Building, the Coalition of San Francisco Neighborhoods, the Native Sons of the Golden West, and San Francisco Tomorrow.

Stanley Marcus, of Neiman-Marcus, stated at the hearing that the building did not meet the firm's space and safety standards. He proposed to incorporate the Rotunda skylight into the new structure, and to continue the Christmas tree tradition.

Allan Jacobs, then Director of Planning, stated at the 11 July meeting that most of the comments at the Landmarks Board hearing had addressed the building's interior, and added that Landmark designation applies to the exterior of a building and offers no protection for the interior.

The Planning Commission adopted Resolution 7212, on 11 July 1974, disapproving City Landmark status for the building for the following reasons:

> "The City of Paris store, which occupied the subject site from 1896 to 1972, and played an important role in the downtown retail life of San Francisco, no longer exists; and
>
> "The commission believes that the use of the site for a major retail activity is of utmost importance to the vitality of the downtown retail area; and
>
> "There is strong evidence that the existing building on the site is structurally unsound and presents a major potential hazard in the case of a major earthquake to the numerous shoppers in the Union Square area, and abatement of this

> safety hazard by strengthening the existing structure would be extremely costly; and
>
> "The owner of the building has stated his intention to raze the existing building, and replace it with a major retail store visually in keeping with the surrounding area; and
>
> "The Commission does not believe the exterior of the City of Paris building is architecturally unique nor meritorious, and if designated as a Landmark only the exterior of the building would be controlled by the provisions of Article 10 of the City Planning Code; and
>
> "The Commission notes that the rotunda, skylight and large open space concept of the interior of the building is architecturally unique and should be preserved if possible, and the owner of the property has stated his intention to reproduce a similar open space within the proposed retail store..."

The resolution also contains the statement that the project sponsor should prepare project plans in consultation with the Commission staff.

On 8 August 1974, Heritage and the Victorian Alliance appealed separately to the Board of Supervisors to override the City Planning Commission's decision; Heritage added that Landmark designation would be consistent with Section 1004.0 (a.1) of the Planning Code.

A Board of Supervisors hearing on the question, scheduled for 12 September, was continued to 30 September, 21 October, and 12 November. Meanwhile, in a 2 November letter to Dianne Feinstein, then President of the Board of Supervisors, Stanley Marcus reiterated his intention to retain the art glass dome and the Rotunda and to incorporate some of the decorative elements of the present Rotunda into the new building. At the 12 November Board of Supervisors' hearing, the Board refused to designate the City of Paris a City Landmark by a vote of 7 to 4.

The City of Paris was designated State Historical Landmark No. 876 on 13 January 1975 for its historical and architectural significance, by William Penn Mott, Jr., then State Historic Preservation Officer. On 7 November 1974, it was nominated to be placed on the National Register of Historic Places by the State Historic Resources Commission of the California Department of Parks and Recreation, based on a nomination form prepared by John Weld Eliassen of the California Heritage Council, 15 October 1974. It was placed on the National Register 23 January 1975.

B. URBAN DESIGN

1. Union Square

Union Square, a registered landmark of the State of California, is unique among San Francisco's urban spaces, serving as both a park and the focus of San Francisco's downtown retail activity.

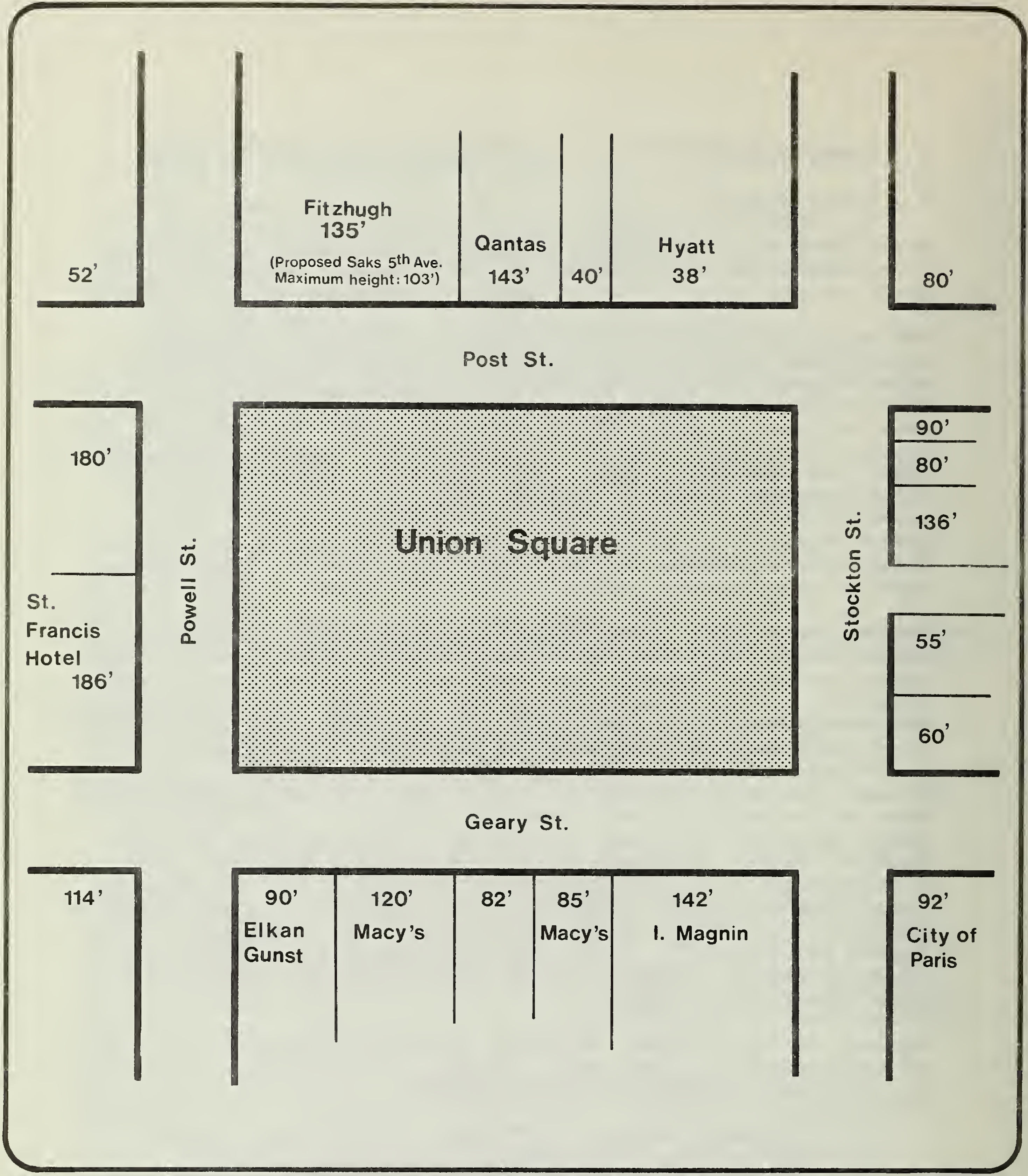
The buildings surrounding the Square, while not of uniform height, are compatible in scale; in combination, they define Union Square visually as a volume of space (Figure 14, page 26). The individual buildings illustrate the stylistic shifts which have followed changing architectural trends. For the most part, however, a commonality of window patterns, heights, and building color has been maintained. The exception is Macy's brick red extension west of the I. Magnin building.

In the opinion of many planners and architects, it is important to avoid the erosion in the visual definition of urban spaces such as Union Square, caused by newer, plainer building styles and the failure of more recent designers to use techniques which define urban space. Most newer buildings in the vicinity of Union Square have made the transition from older architectural styles while maintaining and respecting the integrity of their neighbors. The Qantas Building and the Hyatt Union Square Hotel are examples of this transition, although they are not as effective space-defining buildings as the older structures.

A number of buildings on the Square are considered important by many as individually well-executed examples of the period in which they were designed, or for the role they play in urban design. Among these are: the City of Paris building, the I. Magnin building, the Elkan-Gunst building, the St. Francis Hotel, the Fitzhugh building, the Qantas building, and the lower portion of the Hyatt Union Square Hotel (for locations, see Figure 14, page 26). These and other buildings around Union Square function together to complete the composition of buildings fronting the Square.

Because of the diagonal walkways through the Square, the fronts of the buildings on the four corners of the Square are important in defining the Square's visual limits.

1. Northwest Corner--421 Powell, although only four stories high, possesses a facade with strongly expressed horizontal lines at each floor and a projecting cornice at the fourth floor level. The Fitzhugh building, opposite No. 421 on Powell, and the St. Francis Hotel compensate for the less than desirable height of 421 Powell. The Fitzhugh building is to be demolished and replaced with a new building for a Saks Fifth Avenue store.



Heights Of Buildings Facing Union Square

Figure No. 14

2. Northeast Corner--278 Post anchors this corner. While different in its facade organization, it is similar in effect to the City of Paris building. Strongly expressed horizontals, including major and minor cornices, impart a sense of mass and define height. The building has three floor-high pilasters.[1]

3. Southeast Corner--the City of Paris building by its detail, color, ornamentation, and facade organization, offsets the weakness of the plain, grayish-white I. Magnin building as a space definer.

4. Southwest Corner--The Elkan-Gunst building, which reflects the St. Francis Hotel's color, material and texture, has a large cornice, four-story tall pilasters, and defines the space at its corner.

2. The City of Paris Building

The City of Paris building, constructed in 1896, is designated a State Historical Landmark building (see Chapter III.A., Site History, page 21). While the building was in use, display windows near the corner of Stockton and Geary streets provided visual interest to pedestrians and added to the sense of commercial vitality in the area. The Rotunda, a large interior open space rising through four floors of the building, is capped with an intricate, art glass dome.

The City of Paris building is approximately 92 feet tall, with equal frontages of 137.5 feet on Stockton and Geary streets (Figure 15, page 29). The design of the building is similar in concept and visual organization to many of the commercial and office buildings built in downtown San Francisco between 1895 and 1925. All of these buildings were treated visually as having three distinct horizontal sections, a base or ground floor section, a middle or shaft section, and a top or cornice section. The side of the building facing north toward Geary Street consists of three vertical divisions sharing a common base, shaft, and cornice. Most of the cornice projection has been removed from the present building. Details of the building facade are shown on Figure 16, page 31.

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[1] Pilaster: a nonstructural, vertical, visual, relief element on the surface of a building.

C. LAND USE

1. Area Characteristics

The project site is situated among diverse land use activities ranging from theaters on the west to highrise office buildings on the east. The site is located diagonally opposite the southeast corner of Union Square, where Stockton and Geary streets intersect (Figure 2, page 6). Union Square's park-like setting with trees, grass, walkways, and sitting areas is available as public open space for the use of all who visit, shop, or work in the area (Figure 15, page 29). Public parking is provided beneath the Square, in Union Square Garage.

The block directly south of Union Square contains the I. Magnin store specializing in women's apparel, Macy's department store, an office building, and other specialty shops (Figure 17, page 32). The block east of the Square contains small retail shops, airline ticket offices, and general office space.

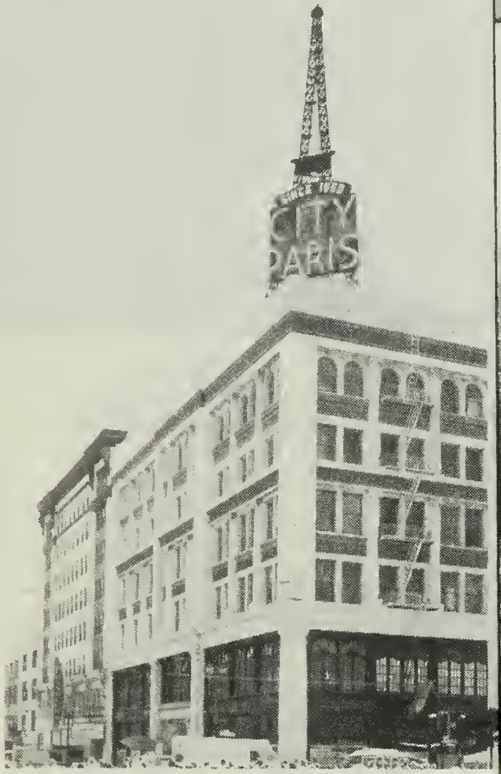
The 12-story St. Francis Hotel occupies the block between Geary and Post streets west of the Square. The ground-level floor contains the hotel lobby, airline ticket agencies, a theater box office, restaurants, and specialty stores. The block directly north of the Square includes the Hyatt Union Square Hotel, Bullock & Jones, specializing in men's apparel, and the Qantas Airways building. A Saks Fifth Avenue retail store, to contain about 133,000 square feet of merchandising and office space on six floors, has been approved for construction at the corner of Powell and Post streets. It would replace the present Fitzhugh building, which has been used for commercial and medical offices. (Refer to Final Environmental Impact Report, Saks Fifth Avenue, Union Square Project, EE 74.286, certified 16 March 1978, for further information.)

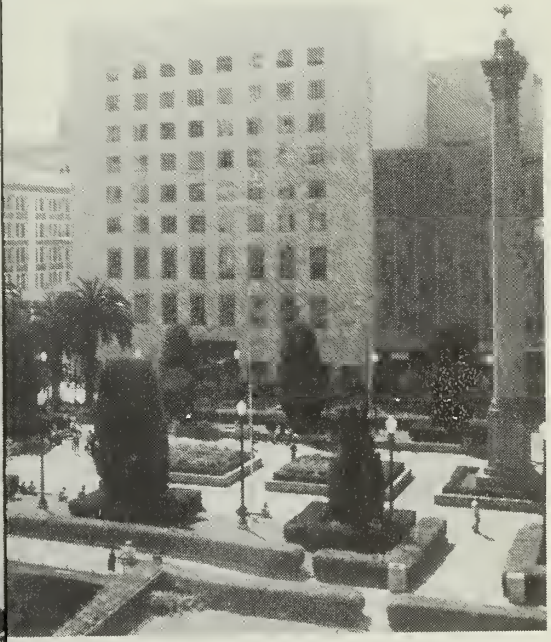
The diversity of shopping opportunities, restaurants, and hotel accommodations surrounding Union Square attracts large numbers of people to the area. Recreational opportunities available on the Square include strolling, lunching, resting, sightseeing, and observing mimes and musicians who frequently perform in the Square. A cross-section of age groups, ethnic backgrounds and occupations among tourists and residents is represented at the Square and its surrounding area. A sidewalk flower-vending stall on Stockton between Geary and O'Farrell streets operates daily, and sidewalk musicians and merchants frequent a two-block radius of the Square.

2. Zoning

Union Square, bounded by Post, Stockton, Geary, and Powell streets, is designated a P district (Public Use District, Figure 2, page 6).

4





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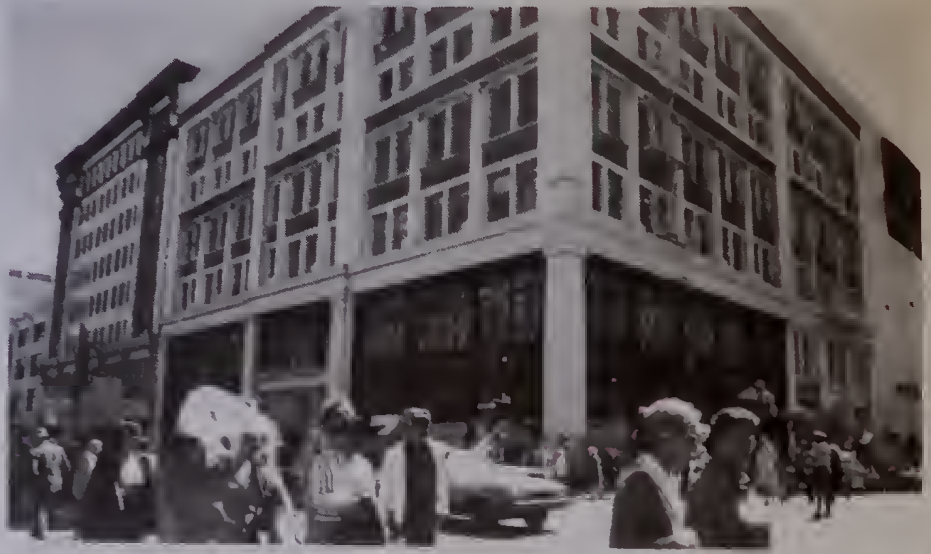
Views of Existing Building

Figure No.15



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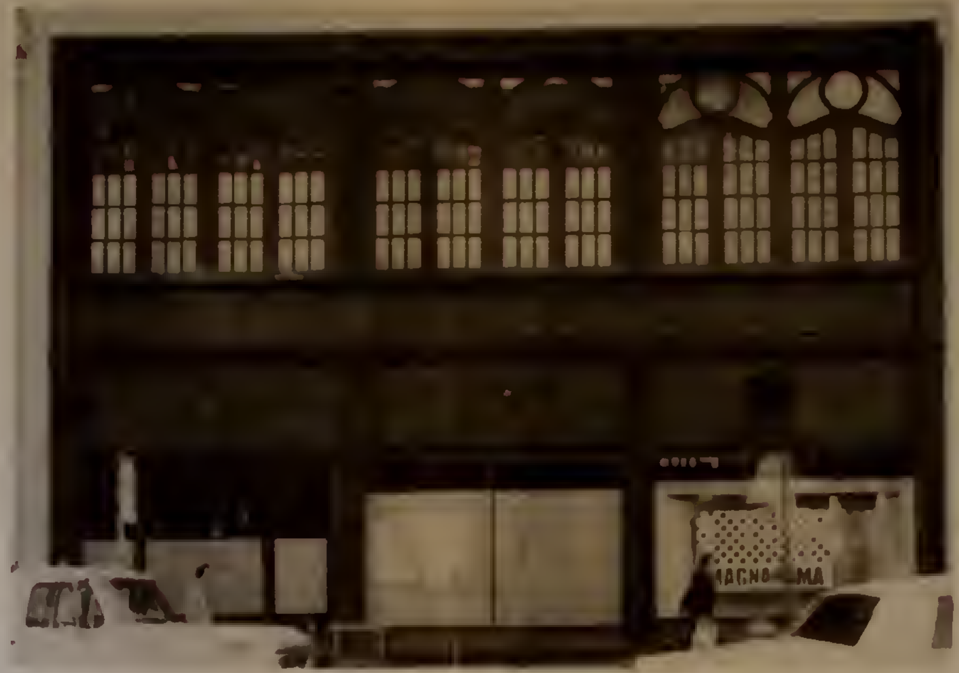

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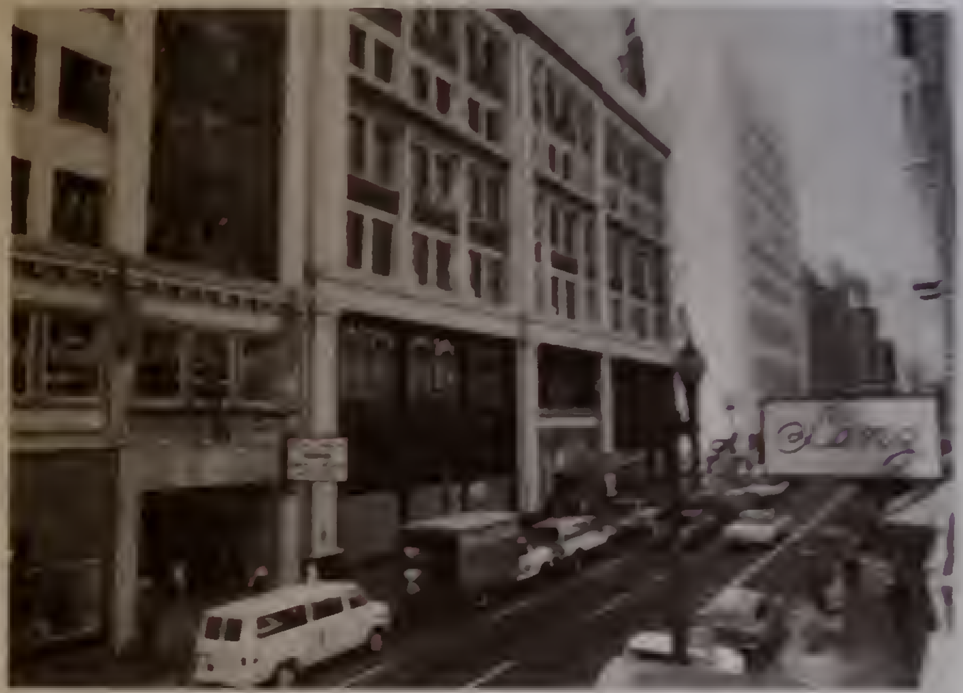

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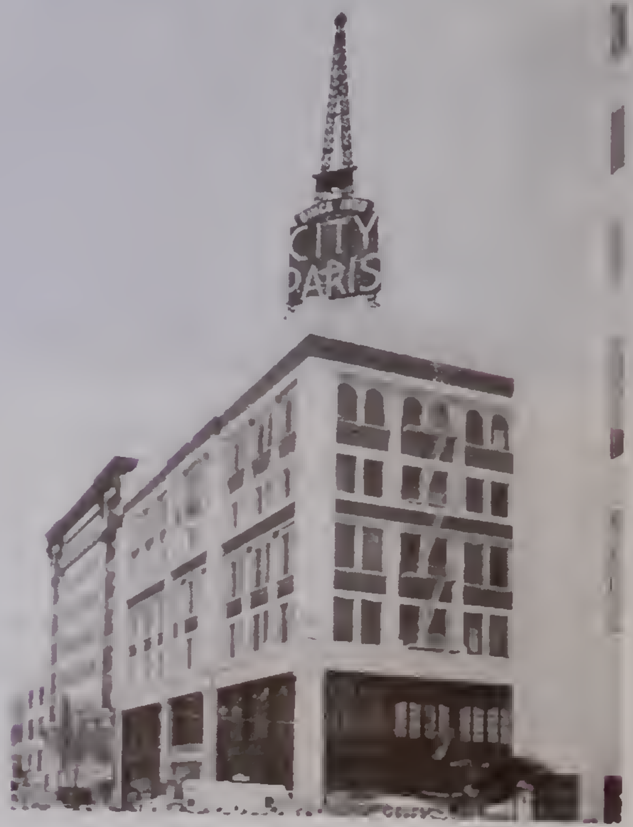

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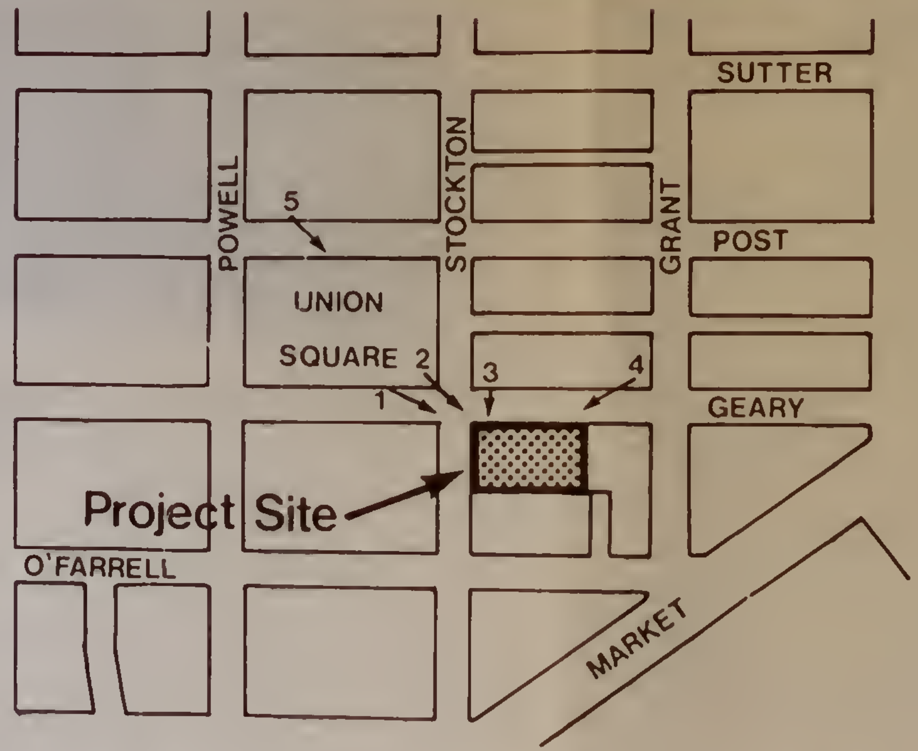

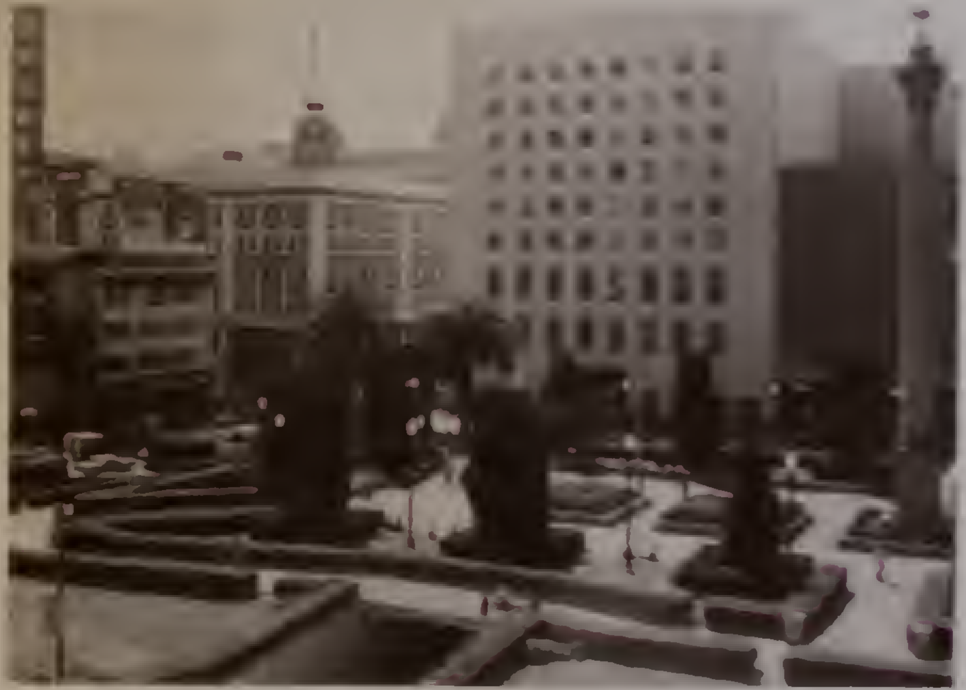

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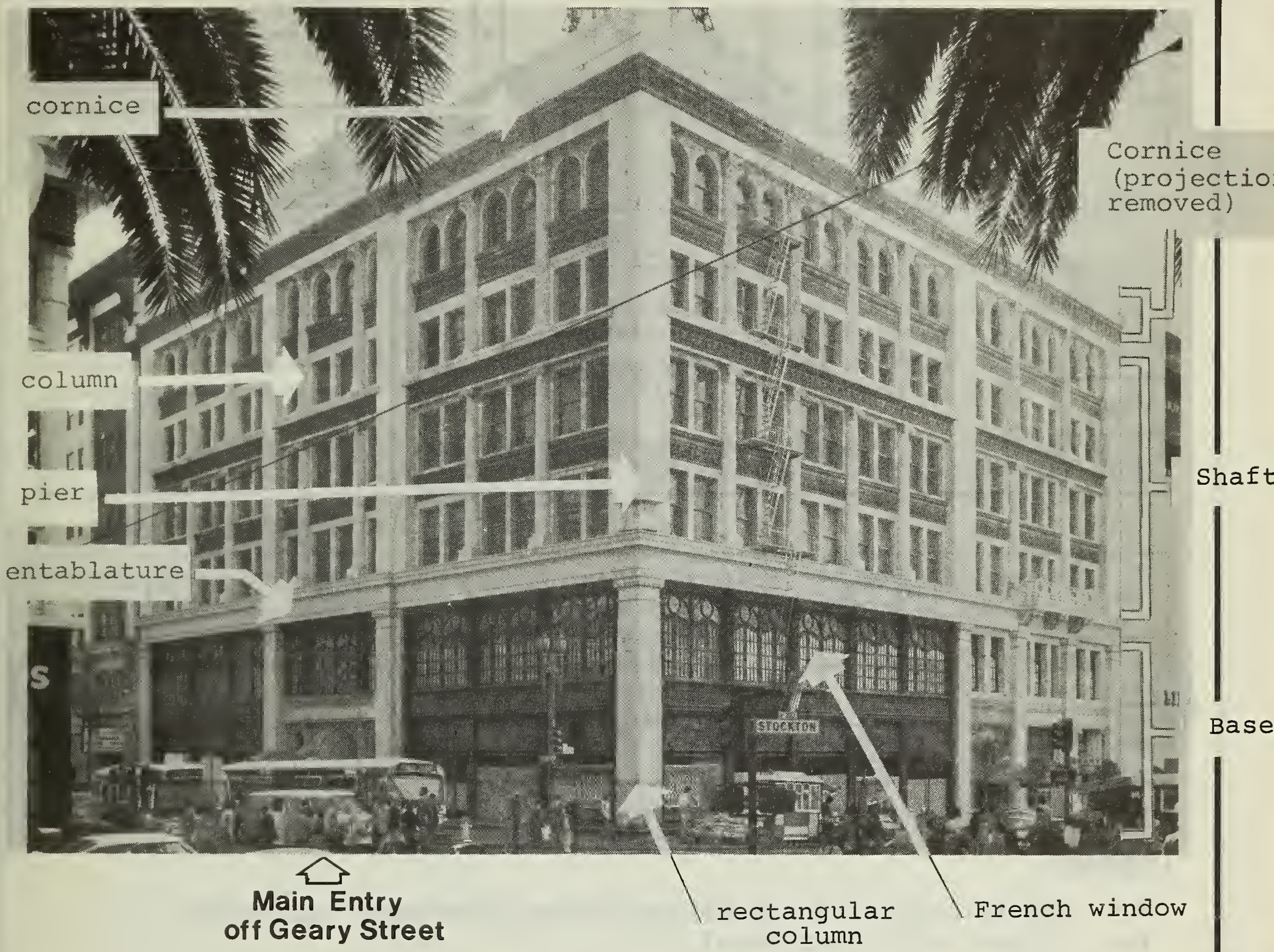
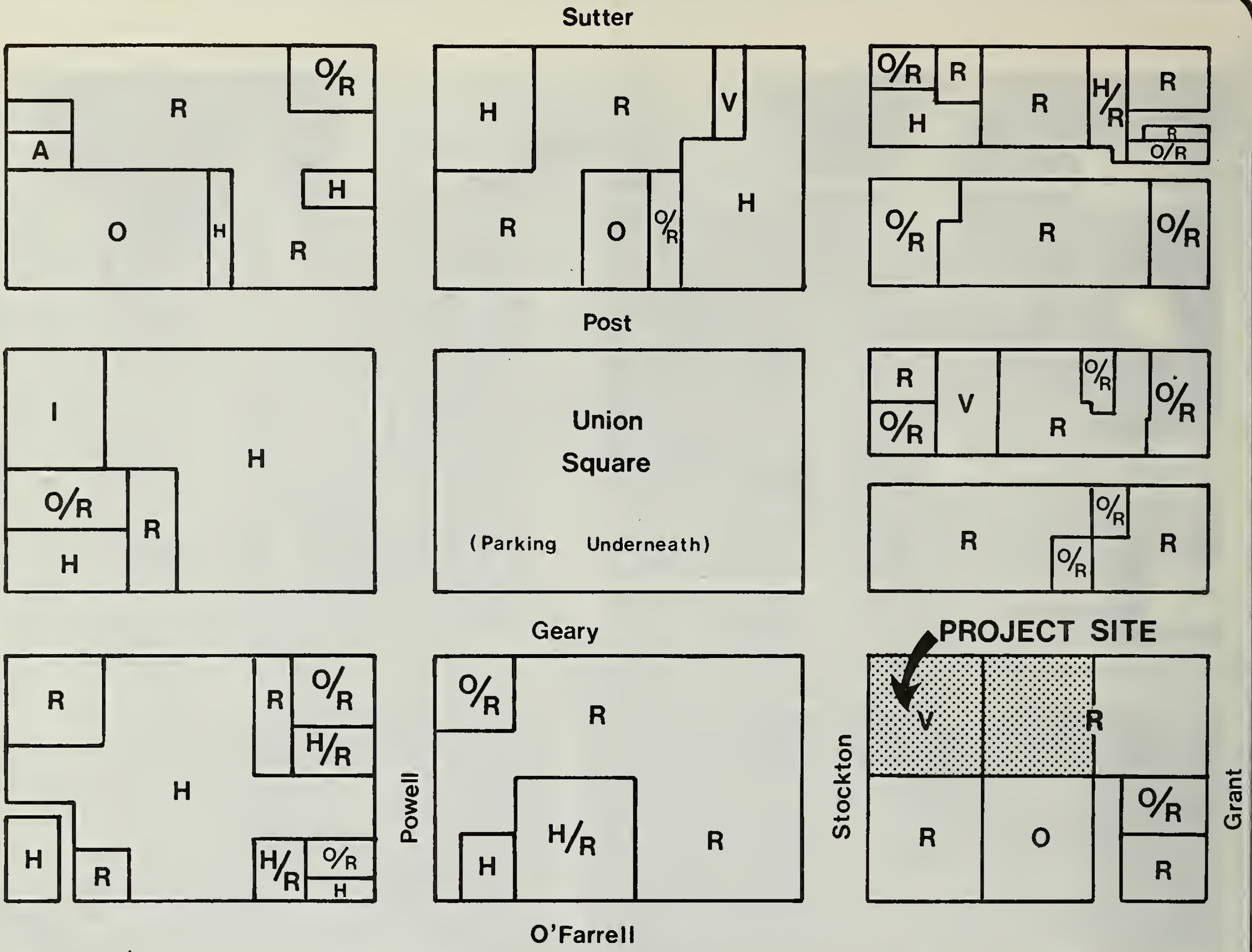
Views of Existing Building

Figure No.15



City of Paris Building
(Corner of Stockton and Geary Streets)

Figure No.16



LEGEND:

- **R** – Retail Stores, Restaurants, Clubs, Theaters, and Banks
- **O** – Office and Professional
- **H** – Hotels
- **I** – Institutions
- **P** – Parking
- **A** – Apartments
- **V** – Vacant Buildings

The above symbols refer to the major use of the property. Where two uses approach equal importance, both symbols are shown, e.g., H/R and O/R. Date of field survey: October, 1977

Land Use Map

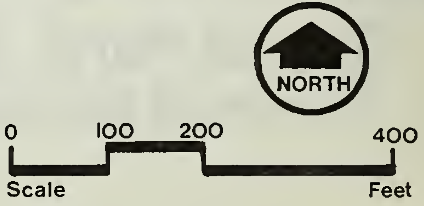


Figure No.17

This designation applies to land owned by a governmental agency which is in some form of public use, including open space.

The site of the proposed project is zoned C-3-R, (Downtown Retail District); the particular district covers an area of some 15 blocks. Within the C-3-R district, continuity of retail and consumer service uses is emphasized in the City Planning Code along with encouragement of activity and amenities of pedestrian interest, and minimization of shopper-motor vehicle conflicts. Frontages must be predominantly retail, no off-street parking is required for individual commercial buildings, and the floor area is, generally, not to exceed ten times the area of the lot.

C-3-G zoning (Downtown General Commercial District), generally west and north of Union Square, includes uses designated for the C-3-R district and, also, provides for entertainment and high-density residential land uses.

The project site is bisected by two height and bulk districts (Figure 18, page 34). The existing City of Paris building, fronting on Geary and Stockton Streets, falls within the 140-X height and bulk district in which building heights are limited to 140 feet with no bulk restrictions. Other structures fronting on Geary Street, east to Grant Street, fall within the 360-I height and bulk district, wherein buildings must not exceed 360 feet in height with the diagonal dimension on the roof not to exceed 200 feet if the building exceeds 150 feet in height.

D. TOPOGRAPHY, GEOLOGY, AND SEISMICITY

The project site is at the foot of the gently sloping southern end of Nob Hill, at elevation 50.5 feet (City datum), with a slope of 3.6% toward the south.

San Francisco may be divided into two geological units: bedrock and surface deposits. Bedrock is encountered at a depth of approximately 186 feet below the surface at the project site and is overlain by undifferentiated clays and sand (141 feet), Bay muds and clays (7 feet), and clean homogeneous dune sand (38 feet).[1] There is no fill overlaying the natural deposits.[2] Groundwater

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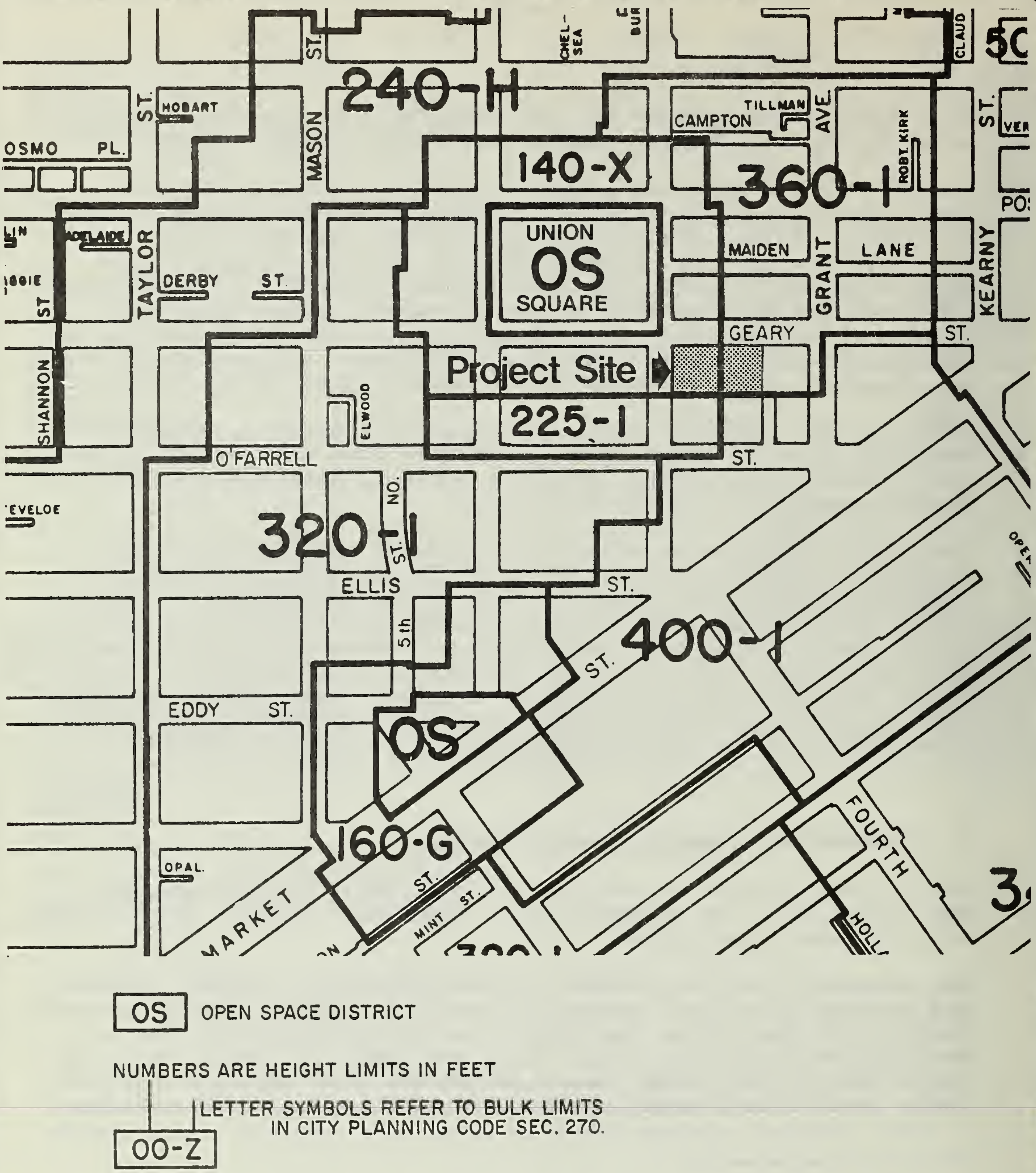
[1] Julius Schlocker, Geology of the San Francisco North Quadrangle, California, U.S. Geological Survey Professional Paper 782, 1974.

[2] Sexton, Fitzgerald & Kaplan, Engineers, "Structural Investigations of the City of Paris Building, Geary and Stockton Streets," San Francisco, California, 4 April 1974.



Height and Bulk Districts

NORTH

0 200 400 800

Scale Feet

Source: San Francisco Zoning Map

Figure No.18

was encountered at +9 feet (City datum) at the northwest corner of Union Square.[1]

The Bay Area is historically one of the most seismically active areas in California, accommodating three fault systems responsible for the largest earthquakes in California since 1800. The San Andreas Fault is located 6 miles west of the project site, and the Hayward and Calaveras faults are located 15 and 25 miles to the east, respectively (Figure 19, page 36).

E. TRANSPORTATION

1. Existing Traffic Conditions

Stockton Street is a four-lane, one-way southbound street south of Sutter Street. Due to loading zones and parking, two lanes are generally available to moving traffic. Available traffic counts on Stockton Street south of O'Farrell[2] show that during both morning and afternoon peak-hours traffic ranges from 1,050 to 1,100 vehicles per hour, and totals about 13,300 vehicles during a 24-hour period.

Recent observations[3] by the EIR traffic consultants indicate traffic volumes on Stockton Street between Post and Geary streets and between Geary and O'Farrell streets are 15% and 20% lower, respectively, than the volumes south of O'Farrell. Thus, peak traffic levels on Stockton Street north of Geary Street represent about 55% of the maximum capacity at the intersection. The peak-hour level of service[4] at the Stockton/Geary intersection is estimated to be in the range of A to B.

Geary Street, a four-lane, one-way westbound street, carries an average daily traffic (ADT) of 9,040 vehicles[5] east of Stockton.

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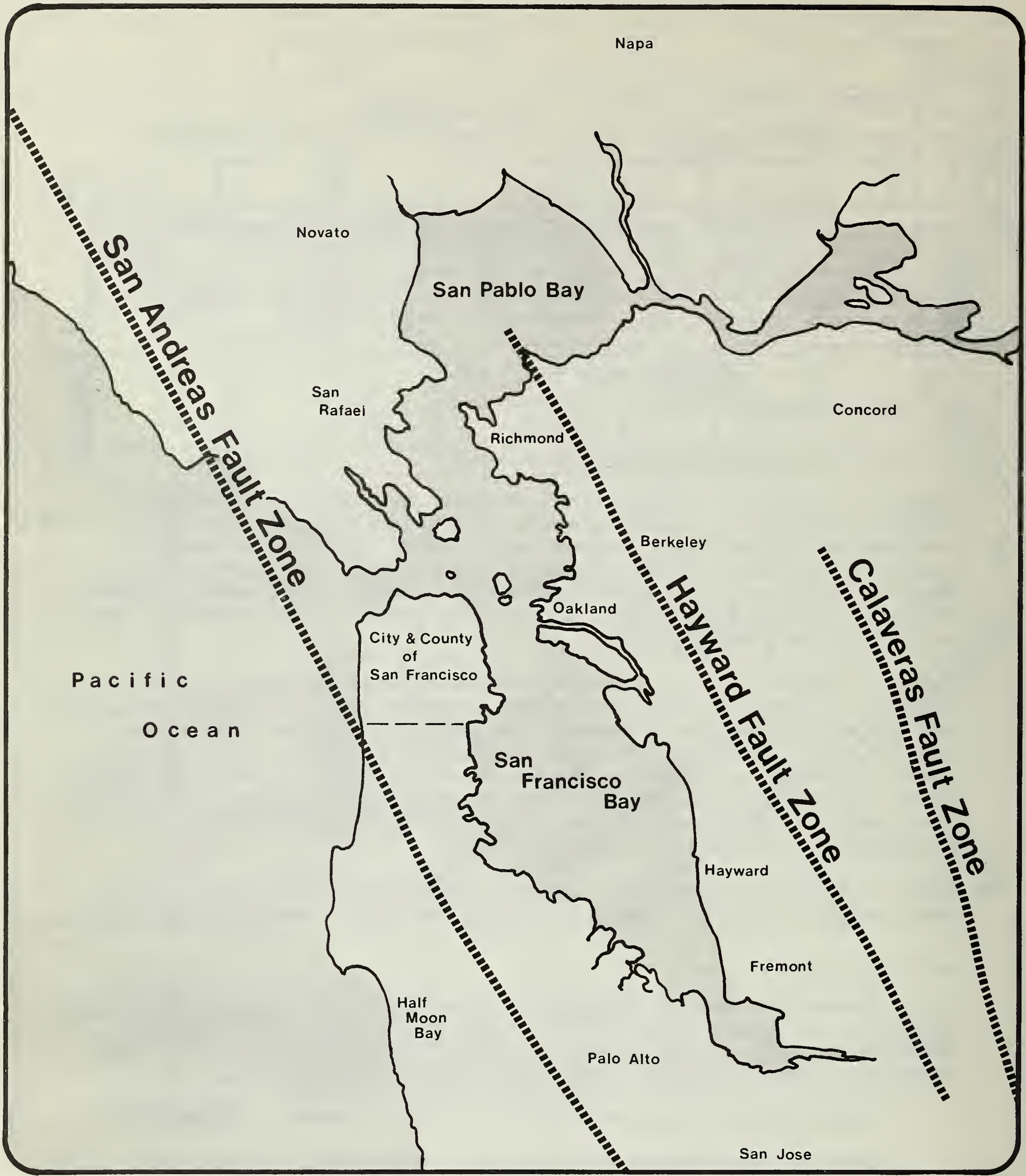
[1] Dames and Moore, Foundation Investigation: Proposed Qantas Building, 13 April 1970, cited in San Francisco City Planning Commission, Saks Fifth Avenue Union Square Project: Final Environmental Impact Report, certified 16 March 1978.

[2] City of San Francisco Traffic Count, Tuesday, 18 May 1976.

[3] Alan M. Voorhees Traffic Counts, Wednesday, 6 September 1978 (15-minute counts conducted at Stockton/Geary and Stockton/O'Farrell, between 1 p.m. and 2 p.m.).

[4] See Appendix A, page 132 for descriptions of levels of service.

[5] City of San Francisco Traffic Count, Tuesday, 26 April 1977.



Active Fault Zones in the San Francisco Bay Area

Source: U.S. Geological Survey/ Brown, 1970

Figure No.19

Due to loading zones and parking, two lanes are generally available to moving traffic. Peak-hour traffic (957 vehicles) is about 55% of the maximum capacity. Observations by the EIR traffic consultants indicate that the peak-hour level of service is B on Geary Street between Stockton and Powell.

2. Existing Parking Conditions

Parking within the project area generally defined as a two-block distance from the project site, is primarily provided by the Union Square Garage, a city-owned structure with 1,081 spaces located beneath Union Square. Rates are 65¢ per hour up to a daily maximum of $4.50. Additional spaces are available at two other city-owned structures, Ellis-O'Farrell and Sutter-Stockton. The Ellis-O'Farrell Garage, on O'Farrell Street east of Powell, has 750 spaces (or 900 spaces with attendant parking) with rates of 65¢ per hour up to a daily maximum of $4.50. About 1,400 spaces are provided in the Sutter-Stockton Garage on Sutter Street at Stockton with rates ranging from 30¢ per hour to $4.50 per day.[1]

On-street parking is generally not available in the immediate area. Curb spaces on Stockton from Post to O'Farrell and Geary from Grant to Powell generally are reserved for freight loading zones (yellow) and passenger loading zones (white). These curb lanes are tow-away zones during the afternoon peak hours (4 p.m.-6 p.m.), when the curb lane is intended to provide an additional lane of traffic capacity. Details of the observance of these restrictions and on-street parking during other hours of the day are contained in Appendix A, page 117.

A parking occupancy study conducted by the City of San Francisco in summer 1975 showed the p.m. occupancy rate to be 89% for the Ellis-O'Farrell Garage and 96% for the Union Square Garage.[2] Discussion with the operator of these garages, in September 1978, indicated that the two garages rarely reach 100% weekday occupancy.[3]

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[1] Telephone conversation with City of San Francisco Parking Authority, 14 August 1978.

[2] "Parking in San Francisco, Appendix to Conditions and Trends", prepared by the San Francisco Department of Public Works and the Department of City Planning, December 1975.

[3] Dave Fansini, Operator of Union Square and Ellis-O'Farrell garages, telephone conversation, 11 September 1978.

The Union Square Garage reaches 100% occupancy during the week before Christmas and during short midday peak periods in August. The Ellis-O'Farrell Garage reaches 100% occupancy for short midday peak periods during the days before Christmas. The Sutter-Stockton Garage is 100% occupied most weekdays between about 11 a.m. and 2:30 p.m.[1] No data are available on the number of cars turned away from these garages at full occupancy.

3. Existing Traffic Conditions

The site is served by BART, and MUNI buses and MUNI cable car lines. The following MUNI buses and cable cars run within three blocks of the project site (see Figure 20, page 39, for route details).

Route 30 Stockton. Runs from Fourth and Townsend (S.P. Depot) to Beach Street. The route operates with a peak load factor[2] of 1.4[3] from 4 p.m. to 4:30 p.m.

Route 30X Stockton Express. Runs from London and Geneva to Beach and Divisadero. The route operates with a peak load factor of 1.7 between 5 p.m. and 5:30 p.m.

Route 38 Geary. Runs from the East Bay Terminal to the Great Highway. This route operates with a peak load factor of 1.7 between 4:30 p.m. and 5:30 p.m.

Route 38X Geary Express. Runs from Montgomery and Market to the Great Highway. Occupancy rates for this route were unavailable.

Cable Car Route 59 Powell & Mason. Runs from Powell and Mason to Fisherman's Wharf. This line operates with a load factor of 2.5 in the peak half-hour from 3:30 p.m. to

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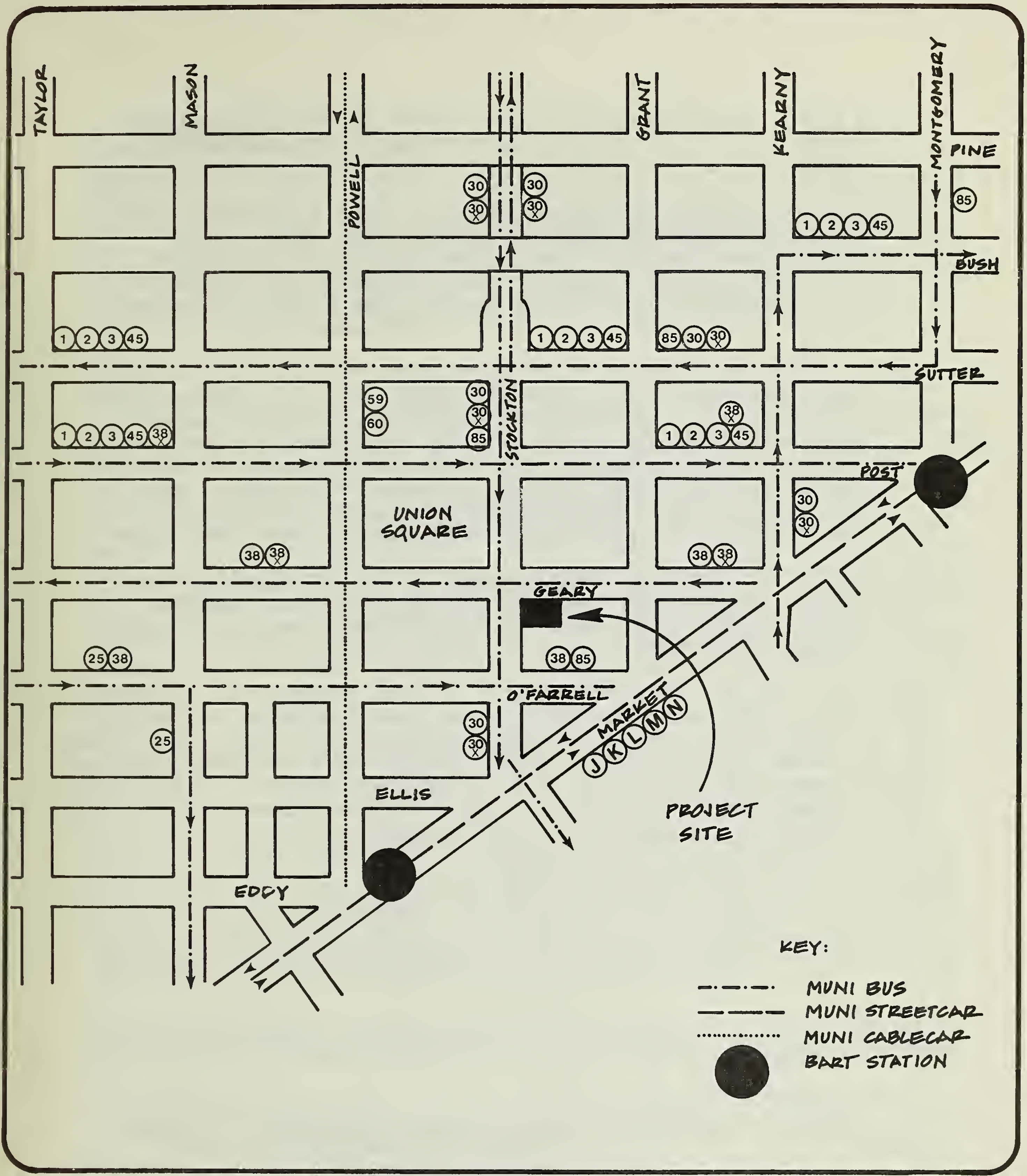
[1] Richard Guinn, Sutter-Stockton Garage, telephone conversation, 7 September 1978.

[2] Load factor is a measure of bus usage and represents the number of passengers divided by the number of seats provided. At a load factor of 1.0, all available seats are being used.

[3] San Francisco MUNI: Report of Traffic Checks Volume Counts for Fiscal Year Ending 30 June 1976 (most recent report available.) This report is the source for all load factors given in this section.



Transit Access

NORTH

Not to Scale

Figure No. 20

4 p.m. Load factors at other times of the day average about 1.3 between 6 a.m. and 10 a.m., 1.7 between 2 p.m. and 3:30 p.m., and about 1.6 between 3:30 p.m. and 6 p.m.

Cable Car Route 60 Powell & Hyde. Runs from Powell and Market to Beach (Victoria Park, at Hyde across from Ghirardelli Square). This line operates with a peak load factor of 2.8 from 5 p.m. to 5:30 p.m. Load factors at other times of the day average about 1.5 between 6 a.m. and 10 a.m., and about 2.1 between 2 p.m. and 5 p.m.

Additional MUNI lines serving the vicinity of the project are the 1, 2, 3 and 45 routes, which run eastbound on Post and westbound on Sutter, the 85 Downtown Shoppers Shuttle Route[1] which runs southbound on Stockton from Sutter and Montgomery between 11 a.m. and 2 p.m., and the 82 Chinatown[1] from Washington Square (Filbert and Stockton) to 4th and Townsend between 10 a.m. and 3 p.m.

The J, K, L, M, and N streetcar lines run along Market Street, two blocks south of the project site, and the Powell Street BART station, three blocks away, is within walking distance.

The MUNI has set load factors of 1.5 for coaches and trolleys and about 1.85 for cable cars as maximum desirable standards.[2] Of the bus lines serving the project area, all have load factors at or below this standard, except the 30X and 38 lines, both of which have load factors of 1.7 in the peak period. Both cable car routes, the 59 and 60, have load factors above stated goals, at 2.5 and 2.8, respectively, during peak periods.

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[1] These are relatively new services, initiated 30 August 1978.

[2] Tom Matoff, Senior Planner, MUNI, telephone conversation, September 1977

4. Pedestrian Conditions[1]

Pedestrian volumes, when transformed into pedestrian densities,[2] may be used as criteria for levels of service for pedestrian circulation.[3] These pedestrian levels of service are described in Table A-2 of Appendix A, page 119. The pedestrian levels of service defined in the Table are designated A through F. These designations are thus the same as those used for traffic levels of service (Appendix A, page 132).

Pedestrian volumes on the Stockton and Geary sidewalks immediately adjacent to the project site represent levels of service A and B. A indicates favorable conditions, with freedom of movement, easy circulation, and few conflicts with either pedestrians walking in the opposite direction (opposing flows) or pedestrians walking across the flow (intersecting flows), and B indicates favorable conditions for opposing flows, but more restricted and dense conditions for intersecting flows. The pedestrian crosswalks (at the south and east of the Stockton/Geary intersection) show levels of service C and D; C indicates average conditions for opposing flows and dense circulation and restricted movement for intersecting pedestrian flows, and D indicates restricted movement with numerous conflicts, acceptable for opposing pedestrian flow but less tolerable for intersecting pedestrian flows.

F. CLIMATE AND AIR QUALITY

1. Climate

San Francisco's climate is dominated by the sea breeze characteristic of marine climates. As a result of this steady stream of marine air, there are few extremes of hot and cold. Temperatures exceed 90 degrees on an average of only once a year and drop below freezing even less often. The warmest month is September, with an average daily maximum of 69°; the coolest is January, with an average daily maximum of 56°.

Prevailing winds in San Francisco are generally from a westerly direction from May to August. During the rainy season (October to April), however, the strongest winds blow from the southeast, with winds coming from the west and northwest as well.

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[1] See also Appendix A, page 117.

[2] Number of pedestrians (pedestrian flows) per minute, per 3.28 feet (1 meter) width of sidewalk or crosswalk.

[3] Fruin, J., Pedestrian Planning and Design, Metropolitan Association of Urban Designers and Environmental Planners, New York, 1971.

The microclimate of the Union Square area is affected by the building configuration around its perimeter. The highrise St. Francis Hotel on the west side of the Square provides upwind protection to the Square from westerly winds, resulting in average wind speeds below 11 miles per hour (the average wind speed above which discomfort is generally experienced) approximately 90% of the year.

Geary and Post streets south and north of the square, running east-west (Figure 2, page 6), have higher wind speeds resulting in pedestrian discomfort approximately 25% of the year.

Shadow patterns in the Square result primarily from buildings to the south. The buildings along Geary Street range in height from 80 to 142 feet above ground surface and cast midday shadows on Union Square from November through February. Between April and September, the entire Union Square is open to sunshine during the hours of peak use (10 a.m. to 2 p.m.).

2. Air Quality

Air Quality in the San Francisco Bay Area is determined by the interplay of topography, air flows (wind speed and direction), and temperature (for example, sunlight, and temperature inversions) acting on pollutant emissions produced by stationary and mobile sources.

San Francisco's air quality is one of the best in the Bay Area. The City receives a steady flow of air from the west which carries pollutants to other parts of the area. Furthermore, San Francisco is generally upwind of major pollutant sources such as industrial areas, airports, freeways and other urban centers. Despite these advantages, there are periods, most often in fall and winter, when the air becomes stagnant. At these times, the entire Bay Area experiences poor air quality.

Since 1974, the nine counties which comprise the San Francisco Bay Area Air Basin have been designated as an Air Quality Maintenance Area for particulate matter, oxidants, and sulphur dioxide, by the California Air Resources Board (ARB). An air quality maintenance area (AQMA) is defined as an area which either, a) currently exceeds one, or more, national air quality standards and is not expected to achieve the national standard by 1980, or b) currently meets all national air quality standards but is expected to exceed one or more standards by 1985. San Francisco falls within Category "a".

Since the Bay Area was designated an AQMA, the Association of Bay Area Governments (ABAG) Environmental Management Task Force (EMTF) has begun development of an Air Quality Maintenance Plan (AQMP). The goals of this plan are the attainment and maintenance of state and federal air quality standards, as effectively as possible, through development of a series of alternative control strategies. A draft version of the plan was approved in June, 1978, by the ABAG General Assembly, and consists of direct emission controls and indirect transportation-related measures.

Air quality in the Bay Area has improved in recent years, primarily as a result of federal, state, and local governmental controls on stationary and mobile emission sources. Table 1, page 44, presents San Francisco air quality data for the last four years. With the exception of 1976 (in which meteorological conditions were particularly conducive to air pollution problems), the data indicate a definite improvement in local air quality.

The prevailing wind pattern in the Bay Area results in a deterioration of air quality east and south of San Francisco. Table 2, page 45, shows that areas downwind of San Francisco have greater air quality problems.

G. NOISE

The Environmental Protection Element of the San Francisco Comprehensive Plan contains the 1974 noise levels along thoroughfares in San Francisco.[1] The data are presented in terms of L_{dn}.[2] The L_{dn} along Geary Street is 75 dBA[2] and the L_{dn} along Stockton Street is 70 dBA.

For this report, noise levels were measured by Charles M. Salter, PE, Consultants in Acoustics, at five locations near the project

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[1] Transportation Noise Section, Environmental Protection Element of the Comprehensive Plan of San Francisco, San Francisco Department of City Planning, September 1974.

[2] The decibel (dB), as used in this report, is the unit of sound level referenced to the sound pressure corresponding to the threshold of hearing. The dBA (A-weighted decibel) accounts for the way the human ear responds to sounds of different frequencies. The L_{dn} (day-night equivalent sound level) is a 24-hour average with 10 dBA added to sound levels measured between 10 p.m. and 7 a.m. to account for people's heightened sensitivity to noise at night. The L_{10}, L_{50}, and L_{90} represent the A-weighted sound levels exceeded 10%, 50%, and 90% of the measurement period, respectively. Refer to Appendix B for a discussion of the fundamental concepts of environmental noise.

TABLE 1

Observed Levels of Pollutants
(BAAPCD Stations - in San Francisco)

	Oxidant		Carbon Monoxide		Nitrogen Dioxide		Sulphur Dioxide		Particulates	
	Max.[1]	Days Exceeded[2]	Max.	Days Exceeded[2]	Max.	Days Exceeded[2]	Max.	Days Exceeded[3]	Max.	Days Exceeded[3]
1974	14	4	9.9	2	16	0	0.07	0.0	57	60
1975	5	0	12.9	3	23	0	0.042	1.7	49	2.6
1976	13	2	11.0	4	25	1	0.053	1.8	55	9.3
1977	5	0	8.9	0	21	0	0.035	0.0	41	1.8

Notes

[1] Definition of max.:

Oxidant: highest hourly average expressed in parts per hundred million
Carbon monoxide: highest 8-hour average value in parts per million
Nitrogen dioxide: highest hourly average value expressed in parts per million
Sulfur Dioxide: highest 24-hour average value expressed in parts per million
Particulates: annual geometric mean in micrograms per cubic meter

[2] Number of days per year when ambient air quality standard was exceeded.

[3] Percent of observed days per year when ambient air quality standard was exceeded.

Source: Bay Area Air Pollution Control District Annual Contaminant and Weather Summary, published annually.

TABLE 2

Number of Days on Which Selected Pollutants Exceeded State or Federal Standards, 1977[1]

Monitoring Site	Pollutant				
	Sulfur Dioxide	Oxidant[2]	Nitrogen Dioxide[2]	Carbon Monoxide[3]	Suspended Particulates[4]
San Francisco (Ellis Street)	0	0	0	0	0
Redwood City	0	3	0	0	0
San Jose	0	13	0	32	10.5
San Rafael	0	2	0	0	0
Fremont	0	2	0	0	0
Livermore	0	17	0	0	1.7

[1] The state standards are specific concentrations and durations of air pollutants that reflect the relationship between concentration and undesirable effects. They are target values, and no timetable exists for their attainment. Federal primary standards represent levels of air quality necessary for protection of public health, with an adequate margin of safety. The provisions of the Federal Clean Air Act as amended in 1970 require that by 1987, the federal standards should not be exceeded more than once a year.

The more restrictive standard, either state or federal, applies. State standards were used for the sulphur dioxide and nitrogen dioxide. Federal standards were used for oxidants and carbon monoxide. Federal and state standards are the same for suspended particulates.

[2] Standards for oxidant and nitrogen dioxide are for highest hourly averages. Therefore, exceeding them one day a year theoretically could represent an emission excess for only one hour.

[3] Standard for carbon monoxide is for the highest 8-hour average.

[4] Suspended particulate figure shown represents the percent of observed days that the state 24-hour standard was exceeded.

Source: Bay Area Air Pollution Control District, Contaminant and Weather Summary, December 1977.

site during the morning and early afternoon of Tuesday, 6 September 1977, and the evening rush hour of Wednesday, 7 September 1977. Three locations adjacent to the City of Paris building were selected and two in Union Square (Figure 21, page 47). Statistical distributions of the noise environment were determined at each location during the early afternoon and evening rush hour periods. The data are shown in Table 3, page 46. L_{10}s[1] ranged from 65-76 dBA; L_{50}s ranged from 61-70 dBA; and L_{90}s ranged from 60-65 dBA. The lower limits of each range were found at Location 5 in Union Square and the higher limit on the Geary Street sidewalk at Locations 1 and 2. These noise levels corroborate the acoustic data in the Comprehensive Plan. During the morning measurements, noise levels of individual vehicle passbys were monitored. Maximum levels of up to 86 dBA were generated by diesel buses on Geary Street. Further information about the noise survey is provided in Appendix B, page 139.

TABLE 3

Summary of Afternoon and Evening Noise Measurements
(in dBA)
Tuesday and Wednesday, 6-7 September 1977

Measurement Location	Date	Time	L_{10}	L_{50}	L_{90}
1	9/6/77	1:20-1:35 p.m.	73	68	64
	9/7/77	4:41-4:56 p.m.	76	69	65
2	9/6/77	1:40-1:50 p.m.	76	67	62
	9/7/77	5:01-5:16 p.m.	76	70	65
3	9/6/77	1:55-2:05 p.m.	69	65	62
	9/7/77	5:17-5:27 p.m.	71	68	64
4	9/6/77	2:10-2:20 p.m.	70	64	61
	9/7/77	5:30-5:40 p.m.	66	64	62
5	9/6/77	2:23-2:33 p.m.	65	61	60
	9/7/77	5:44-5:54 p.m.	65	62	60

H. COMMUNITY SERVICES

Fire and police protection for the project site are provided by the San Francisco Fire and Police Departments.

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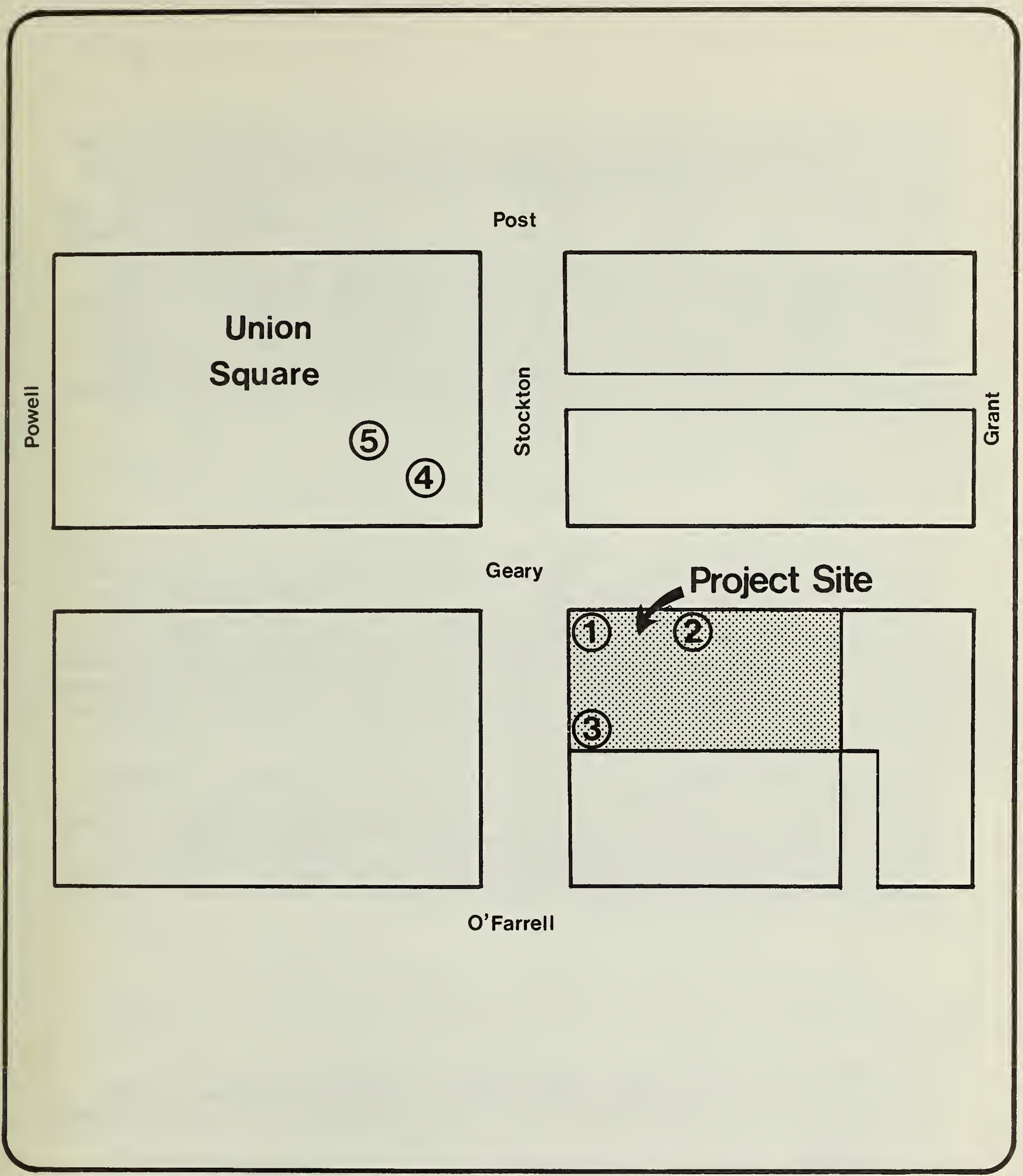
[1] See footnote 2, page 43, for definition.



Noise Measurement Locations

Not to Scale

Figure No. 21

The wastewater generated in the project area is collected in the City's combined wastewater sewers which transport both sanitary wastewater and stormwater runoff. The flow is transported to the North Point Water Pollution Control Plant, located at Bay and Kearny streets. The North Point Plant provides advanced primary treatment, which removes approximately 50% of the pollutants by conventional settling processes and chemical coagulation with ferric chloride.[1] Due to the plant's limited capacity to treat flows during storms, and state and federal requirements to provide secondary treatment to remove about 90% of the pollutants, the City is planning to transport the sewage to the Southeast Treatment Plant via a trans-city pipeline, as part of its Wastewater Master Plan.[2]

I. ENERGY

The project site lies within the service area of Pacific Gas and Electric Company (PG&E), which supplies electricity to the City of Paris building. Magnarama, the tenant of the building from February 1975 to February 1978 occupied only a portion of the building's first floor (approximately 10,000 square feet). Average monthly consumption of electricity was 25,000 kilowatt-hours (kwh) or 2.5 Kwh per square foot of occupied interior floor space. No natural gas was consumed in the building during the Magnarama tenancy according to PG&E billing records.[3]

The other building on the site, 133-157 Geary Street, consumes approximately 27,000 Kwh per month (based on 1976-1977 utility billing records), or about 1 Kwh per square foot of leased floor area (leased area = 27,000 square feet). Average monthly consumption of natural gas (based on 1976-1977 utility records) is approximately 210.3 million Btu,[4] or about 7,500 Btu per square foot of leased floor area.

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[1] EIR/S San Francisco Wastewater Master Plan, May 1974, Implementation Program 1, North Point Transport Project, City and County of San Francisco, U.S. Environmental Protection Agency.

[2] Ibid.

[3] John Wunderlich, Pacific Gas and Electric Company, telephone conversation, 26 August 1977.

[4] British thermal units. A Btu is the heat required to raise one pound of water 1° Fahrenheit.

CHAPTER IV
ENVIRONMENTAL IMPACTS

A. HISTORICAL

The implementation of the proposed project would entail the demolition of a State Historical Landmark which also is listed on the National Register of Historic Places. The Tax Reform Act of 1976 provides disincentives for demolishing historic buildings: demolition costs are not deductible, and accelerated depreciation of the building is not possible.[1] Even though the proposed project would incorporate the existing Rotunda and art glass dome in the design, the tax disincentives would still be in effect.[2] However, the tax disincentives are considered minimal to the project sponsor when the total cost over the life of the proposed project is evaluated.

B. URBAN DESIGN

A number of policies contained in the Urban Design Plan,[3] an element of the San Francisco Master Plan, relate to the existing City of Paris building on Union Square and to the proposed Neiman-Marcus specialty store that would replace it. The Urban Design Plan is meant to serve as a guide to new development, so that the physical environment is not abruptly or severely disrupted and that harmony is preserved between old and new construction.

> Conservation Policy 4: "Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development."[4]

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[1] John Burns, Architect, Historic American Buildings Survey, National Park Service, Office of Archaeologic and Historic Preservation, telephone conversation, 8 September 1978.

[2] Hans Kreutzberg, Historian, Office of Historic Preservation, telephone conversation, 8 September 1978.

[3] San Francisco Department of City Planning, adopted by Resolution 6745 of the San Francisco City Planning Commission, 26 August 1971.

[4] Urban Design Plan, p. 25.

> Conservation Policy 5: "Use care in remodeling of older buildings, in order to enhance rather than weaken the original character of such buildings."[1]

As the proposed project would entail demolition of the building, except for the Rotunda, the project would partially conform to Conservation Policy 4 and would not conform to Conservation Policy 5. The Rotunda and art glass dome would be relocated to the corner of Geary and Stockton streets. The Rotunda and its art glass dome were originally designed to admit light into the interior of the existing building. In its new location the Rotunda would retain that function and increase the amount of daylight that would be admitted into the proposed building.

> Conservation Policy 7: "Recognize and protect outstanding and unique areas that contribute in an extraordinary degree to San Francisco's visual form and character."[2]

> Major New Development Policy 4: "Promote building forms that will respect and improve the integrity of open spaces and other public areas."[3]

An effective visual terminus at each of the corners opposite Union Square would increase definition of the Square's horizontal limit, and, thus, the perceived sense of its space. Due to its transparency, the glass which partially encircles the Rotunda would not reinforce a sense of "containment" in the Square. Although in some lights the Rotunda glass would be reflective rather than transparent and would appear dark, the building corner would not be a clearly defined point providing a visual terminus for the Square. As the roof line is not expressed by a projecting cornice or similar design feature, the building would not aid in the definition of the apparent height or upper limit of the Square (for height of buildings on Union Square, see Figure 14, page 26).

> Major New Development Policy 1: "Promote harmony in the visual relationships and transitions between new and older buildings."[4]

The overall organization of the facade as a single form with freely placed cutouts contrasts with the formal design of most of the surrounding buildings which have visually distinct base, midsection, and top design treatment. The location and positioning of windows in the proposed building would contrast with the orderly and symmetrical window placement in other buildings facing Union Square.

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[1] Urban Design Plan, p. 25

[2] *Ibid.*

[3] *Ibid.*, p. 36.

[4] *Ibid.*

> Conservation Policy 6: "Respect the character of older development nearby in the design of new buildings."[1]
>
> Major New Development Policy 2: "Avoid extreme contrasts in color, shape, and other characteristics which will cause new buildings to stand out in excess of their public importance."[2]

The color of the building would relate more to the red brick of Macy's extension and the beige Liberty House building than to the generally grayish color of other buildings on Union Square, and the larger, nine-story I. Magnin building directly opposite across Stockton Street.

While the height and rectangular form of the proposed building would be compatible with existing buildings facing Union Square, features of the building's exterior form would affect its appearance. Because there would be few windows and a lack of surface detailing, the building would contrast to older buildings surrounding Union Square which have numerous windows and surface detailing that aid in defining space. The rounded building corner provided by the Rotunda, the recess in the building's face extending upward from each of the six display windows, and the cut-out at the roof line on Geary Street are dominant visual features of the building's exterior and would relate directly to the overall length, width and height of the structure because of their size, rather than reflect the design characteristics of adjacent buildings. These features would provide visual relief from the rectangular form of the building and would be more fully perceived from Union Square and distant buildings rather than by the pedestrian on the street adjacent to the building.

The net effect of all the above factors is a building that is less effective in fulfilling its urban design role than the existing City of Paris building.

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[1] Urban Design Plan, p. 25.

[2] *Ibid.*, p. 36.

> Neighborhood Environment Policy 13: "Improve pedestrian areas by providing human scale and interest."[1]

The proposed project is similar to existing uses in Union Square and would contribute to street activity in the area. The building would maintain the existing continuous street fronts in the area and aid in the definition of street space. It would reduce the amount of street level store window area currently visible to the pedestrian. The checkerboard pattern of two-foot diagonal squares on the facade, with no change at the base on top of the building to provide a sense of human scale at the adjacent sidewalk, emphasizes the monolithic size of the building. The design of the building's exterior would relate to a scale larger than the pedestrian environment.

> Major New Development Policy 3: "Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations."[2]

Architects for the proposed project, Johnson/Burgee, have provided the following description for the design of the building.

> "The proposed Neiman-Marcus building, while not actually facing Union Square occupies an important corner touching the Square at Stockton and Geary Streets.... The art glass dome rotunda will be removed, restored and re-erected on this important corner. The Dome Room will be enclosed in glass for its full height facing Union Square making it visible from the Square and will become the entrance room to the new store. The traditional Christmas tree will be placed in this rotunda which will then also be visible from the Square.... The exterior material is granite set in a traditional diagonal pattern.... The facades are further broken at the street level by show windows which are also extended through several floors of the building in an opaque glass shape familiar in the awnings of the St. Francis hotel on Union Square. These extensions of the show windows tend to break up the flat windowless facade normally dictated by a department store function. The restaurant is provided on the fourth floor around the restored Dome Room overlooking Union Square. The building has been carefully scaled to maintain the character of the other historic buildings on the Square."[3]

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[1] Urban Design Plan, p. 57.

[2] Ibid., p. 36.

[3] Letter to Environmental Impact Planning Corporation, 22 September 1978.

C. LAND USE

The existing City of Paris building contains an estimated 70,000 square feet of retail sales floor area; the 133-157 Geary building contains an estimated 15,000 square feet of retail sales floor area, and 58,000 square feet of office space. The Magnarama retail operation occupied part of the ground floor of the City of Paris building until Spring 1978; this building is now vacant. Four retail businesses, including a shoe store and candy store, clothing and musical instrument stores, employing about 22 persons altogether, presently occupy the 133-157 Geary building. The total gross 120,000 square feet of available floor space in the Geary Street building includes basement areas. A total of approximately 28,000 square feet (including sales area and storage facilities) is leased by the retailing firms on a month-to-month basis. Approximately 92,000 square feet of the gross floor area is vacant.

Demolition of both the City of Paris and 133-157 Geary buildings to enable construction of the proposed Neiman-Marcus structure would require the relocation or cessation of current retail operations at the site. Employees would either remain with present employers at new locations, or seek other work.

The proposed Neiman-Marcus building would contain 136,500 square feet of retail sales floor area (excluding service and storage areas), for a net increase of approximately 51,500 square feet of retail floor area in the downtown shopping district; the proposed building would contain no leasable office space. This would constitute a loss of 58,000 square feet of office space. The proposed demolition of the Fitzhugh building on the northwest corner of Union Square would eliminate 69,000 square feet of office space, making the combined loss of office space approximately 127,000 square feet in the downtown retail area.

Street frontage of the proposed building would be retail, conforming to the land use requirements of C-3-R zoning. The proposed building would be 90 feet tall, within the bulk limits of the City of San Francisco Planning Code.

D. GEOLOGY AND SEISMICITY

The major geologic hazard associated with the proposed project is groundshaking from a seismic event. The project would not increase the likelihood of such an event, but the possibility of a large earthquake imposes design constraints on any project constructed in this area.

The greatest potential damage to San Francisco as a result of earthquake ground motion is believed to be from the San Andreas

Fault. Movement along this fault in 1906 (equivalent to Richter magnitude 8.25) resulted in a 20-foot lateral displacement in some places and caused severe damage to structures in San Francisco, partly from the ground motion itself and partly from the fires that broke out following the earthquake.

The City of Paris building suffered major damage in the 1906 earthquake. The south and east walls collapsed almost entirely, together with the interior structural frames and floors. The collapse of the floors was triggered by the failure of a supporting column. The north and west walls suffered minor damages.[1]

The project would be built to conform to the San Francisco Building Code and would therefore incorporate the required seismic design elements for minimizing seismic hazards. Designing a building to resist earthquakes always involves a risk. No building, even if it meets the City's Building Code, will be 100% safe during a future earthquake. However, it is possible to estimate future damage to buildings based on maximum probable earthquake, distance to epicenter, subsurface conditions, past performance of buildings during earthquakes, and construction methods. By quantifying these parameters, damage factors have been developed[2] and a map delineating zones of varying damage potential during an earthquake has been prepared.[3] Figure 22, page 55, shows that the proposed project site is located in a zone designated "D", implying that during an earthquake this area would experience general, but not universal, fall of brick chimneys and cracks in masonry and brickwork.[4] The scale of zones ranges from "A", very violent, to "E", weak.

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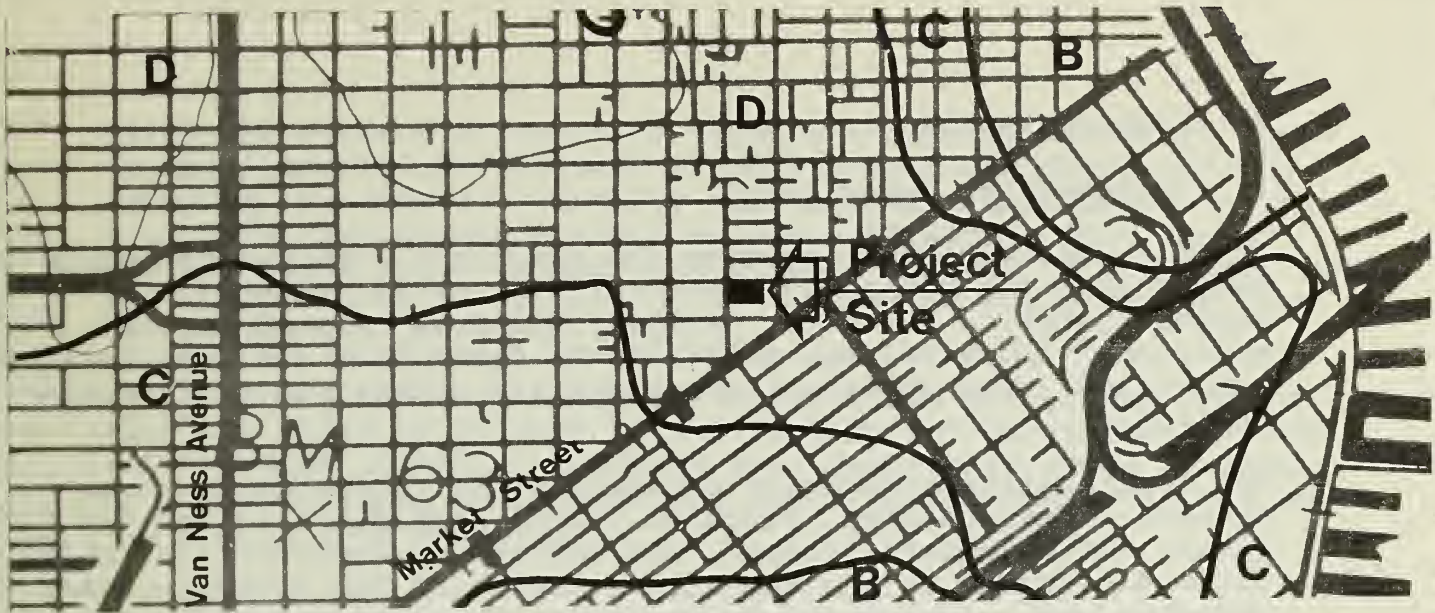
[1] Sexton, Fitzgerald & Kaplan, Engineers, "Structural Investigations of the City of Paris Building, Geary and Stockton Streets," San Francisco, California, 4 April 1974.

[2] John A. Blume et al., Earthquake Damage Prediction: A Technological Assessment, Report 17, Department of Civil Engineering, Stanford University, October 1975.

[3] URS/John A. Blume & Associates, San Francisco Seismic Safety Investigation, prepared for the San Francisco Department of City Planning, June 1974.

[4] Ibid.



A Very violent. Cracking and shearing of rock masses. Deep and extended fissuring in soil, many large landslides and rockfalls.

B Violent. Fairly general collapse of brick and frame structures when not unusually strong. Serious cracking of better buildings. Lateral displacement of streets, bending of rails and ground fissuring.

C Very Strong. Masonry badly cracked with occasional collapse. Frame buildings lurched when on weak underpinning with occasional collapse.

D Strong. General but not universal fall of brick chimneys. Cracks in masonry and brick work.

E Weak. Occasional fall of brick chimneys and plaster.

NOTE: Intensities are given for earthquakes similar to the 1906 event in magnitude and proximity to San Francisco.

Estimated Intensity of Future Ground Shaking

Source: San Francisco Seismic Safety Investigation, John A. Blume & Associates, June, 1974

Figure No.22

E. TRANSPORTATION

1. Construction Impacts

Traffic impacts resulting from the project's construction would depend upon the timing of construction traffic and choice of access routes to the site. Impacts would be related to the additional truck volumes generated by demolition and construction activities, with attendant nuisances and effects on traffic congestion.

The construction site would potentially be reached from three streets: Geary Street, Stockton Street, and Security Pacific Plaza, off O'Farrell Street. The impacts of construction traffic would depend on the specific location of the access points. Entering and existing trucks would impede regular traffic flow and would block pedestrian movements on the sidewalk. Of the three potential access points, the Security Pacific Plaza would be preferable, as traffic volumes[1] and pedestrian levels[2] on O'Farrell Street are lower than on Stockton and Geary Streets.

The basement of the existing City of Paris building extends under the sidewalk on both Geary and Stockton streets. During the first six months of demolition and construction, excavation and reconstruction of the basement would entail closing the sidewalks in the immediate vicinity of the site. The flower stand on the east side of Stockton south of Geary would have to be relocated during this period. At present, the project sponsor is unable to estimate the exact location of the barricade that would be built around the excavation during the six-month period. If the barricade had to be erected beyond the line of the existing sidewalk it would encroach on the road space of Geary and Stockton streets. Under these circumstances both streets would be reduced from four to three lanes; this would result in the loss of parking and delivery spaces in these lanes during the off-peak periods, and loss of one moving traffic lane between 4 p.m.-6 p.m. when the curb lanes on both streets are tow-away lanes. Thus, during the evening peak hours, the number of lanes available to moving traffic would be reduced from four to three on Stockton Street and from three to two on Geary Street.[3]

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[1] Traffic volumes on O'Farrell Street are about 25%-35% of capacity during the noon peak hour.

[2] Pedestrian levels are estimated to be about 60-70% lower on O'Farrell Street than Stockton Street. Observation by EIR traffic consultants, 12 September 1978.

[3] The northside curb lane on Geary Street is a bus-only lane between 4 p.m. and 6 p.m.

After the first six months of construction, the barricade could be relocated to the sidewalk along Stockton and Geary streets, reducing the sidewalk width by approximately 6.7 feet. The existing effective sidewalk width on Geary Street is 10.6 feet.[1] The barricade would reduce that effective width to 3.9 feet. The pedestrian level of service at this location would change from the existing A level[2] to level B.

The sidewalk width on Stockton Street would be reduced from an absolute width of 16 feet to 9.3 feet by the barricade. As the flower stand currently occupies more space than would be taken by the barricade, the pedestrian level of service would not be reduced in this location.

2. Impacts of Operations

a. Trip Generation of the Proposed Project

To estimate the number of people generated by the proposed project, a survey[3] was conducted at the I. Magnin[4] specialty store, also located at Union Square. This store had a generation rate of 2,130 person trips (inbound and outbound) on a Friday peak hour, and 645 person trips during the peak 15 minutes. This corresponds to a peak-hour generation rate of 13 persons per 1,000 square feet of sales area. The observed rates represent a typical Friday. Applying these observed rates of trip generation to the proposed project the following person-volumes would be generated.

	One-Way Person Trips Generated[5]	
	Average Friday	Peak Friday
For the whole day	7,800	13,320
For the peak hour	1,560	2,400
For the peak 15 minutes	480	720

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[1] See Appendix A, page 120.

[2] See Appendix A, Table A-1, page.

[3] Survey conducted by Alan M. Voorhees & Associates, transportation consultants, Friday, 26 August 1977 between 12:30 p.m. and 3:15 p.m., at all three entrances.

[4] I. Magnin's sales area is estimated at 163,000 square feet (see Appendix A, page 121), compared to the estimated sales area of the proposed project of 135,600 square feet.

[5] A more detailed description of trip generation estimation is included in Appendix A, page 121.

The volumes shown for a peak Friday, representing a worst-case condition, such as a Friday after Thanksgiving, have been estimated on the assumption that the observed peak generation for an average (or typical) Friday would increase by 50% on a peak Friday.

The above trips represent the estimated additional one-way person trips generated by the project site (not the additional person trips into the Union Square area).

The survey was also designed to obtain travel behavior information such as travel origin, mode of travel, and the number of stores visited. The results of the survey are presented in Appendix A.

The estimated volumes generated by the proposed project, shown above, compare to the following estimated volumes when the City of Paris was in full operation:[1] 7,200 person trips for the whole day and 1,440 person trips in the peak hour for an average Friday, and 12,295 daily person trips and 2,215 peak hour person trips for a peak Friday.

Because many future Neiman-Marcus customers would shop in the Union Square area (roughly bounded by Sutter, Kearny, Market, and Mason Streets) even if Neiman-Marcus were not built, there is a difference between the total number of trips generated by the store if it were isolated and the number of additional trips into the Union Square area generated by the store. As each shopper visits an average of four stores, it can be assumed that only one out of four visitors (25%) can be assigned to the new project. The following would be the additional one-way person trips generated by the proposed project in the Union Square area:

	Average Friday	Peak Friday
For the whole day	1,950	3,330
For the peak hour	390	600
For the peak 15 minutes	120	180

The proposed Saks Fifth Avenue store (to be located on the northeast corner of Post and Powell streets) would generate an estimated 1,100 to 1,250 additional one-way trips to or from the

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[1] See Appendix A, page 122, for calculation of estimated volumes for City of Paris full operation.

Union Square shopping area.[1] This would represent a 56% to 64% increase over the transportation impacts of Neiman-Marcus.

b. Pedestrian Impacts in the Immediate Vicinity

Pedestrian impacts resulting from the proposed project would mainly be concentrated on the sidewalks and crosswalks immediately around the proposed store. It is estimated that the five-minute peak pedestrian flows on an average Friday and on a peak Friday would increase by up to 38% and 43%, respectively. These increases would occur perhaps once or twice during the day. The increases would result in a D/E pedestrian level of service[2] on an average Friday (restriction of movement and conflicts with opposing traffic and with intersecting traffic) and an F pedestrian level of service on a peak Friday ("intolerable" conditions) at the pedestrian crossing of Geary Street in front of the proposed project site. The pedestrian crossing of Stockton Street would operate at levels of service D and D/E on average Fridays and peak Fridays, respectively. The sidewalks would experience A or B pedestrian levels of service. The above discussion represents worst-case conditions.

The worst pedestrian conditions would be at the southeast corner of Geary and Stockton streets, where the main entrance to the proposed project would be and where pedestrians would accumulate while waiting for the green light at the crossings. The proposed building design would somewhat relieve this by replacing the existing sharp corner of the City of Paris building. The proposed design would increase the effective width of the sidewalk corner by about seven feet. Between 50% and 80% of all shoppers entering or exiting the proposed store would use the corner entrance. The remainder would use the second shoppers' entrance on Geary Street. Shoppers would not tend to accumulate in front of the main entrance, because they would not have to wait to enter.

It is concluded that with the proposed project the pedestrian densities would worsen the levels of service by one half or one full level. Pedestrian conditions would be most critical on the Geary Street and Stockton Street crosswalks where they would reach levels of service D/E and D on average Fridays and F and D/E on peak Fridays.[1]

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[1] See Appendix A, page 125, for calculation of additional trips generated by the proposed Saks Fifth Avenue project.

[2] See Appendix A, Table A-2, page 119, for the definition of pedestrian levels of service.

c. Impacts on Vehicular Traffic

The additional vehicle trips that would be generated by the proposed project are estimated at 780 trips on an average Friday and 1,330 trips on a peak Friday.[2] This traffic increase, including taxi trips, would be added to the traffic entering and leaving the downtown shopping area, which consists of approximately 40 blocks. No precise traffic assignment to the streets can be made of these traffic increases because of uncertainties regarding their entry points to the downtown area and the specific destinations of the vehicles. The additional traffic would be distributed over a number of downtown streets.

The maximum impact is estimated as follows. If it is assumed that all 1,330 additional daily vehicle trips generated by the proposed project on a peak Friday (665 coming and 665 going) would end and start at the Union Square Garage--which is unlikely, particularly on a peak Friday--and that an additional 850 vehicle trips[3] estimated to be generated by the proposed Saks Fifth Avenue store on the northwest corner of Union Square exhibited similar travel patterns, the total additional daily vehicle trips would number 2,180 (1,090 coming and 1,090 going). Assuming further that these 1,090 vehicles, as they approach the Stockton/Geary intersection, which is the critical link, would be equally divided between Geary Street and Stockton Street, the daily increase would add 3%-6% to the present daily traffic.

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[1] See Appendix A, page 127, Table A-5, for a detailed analysis of changes in levels of service.

[2] These estimates of additional traffic do not include trips by Neiman-Marcus store employees (estimated at a total of 450 on average days and 550 on peak days). It may reasonably be expected that employees would generally arrive and depart from the store at different times than the peak shopping trips to the store (which would occur between 10 a.m. and 4 p.m.). See Appendix A, pages 128-129, where the estimates indicate that vehicular traffic impacts from employees would not be measurable and the transit increase would be less than 4%.

[3] Represents 64% of the 1,330 additional vehicle trips that would be generated by Neiman-Marcus. (See Appendix A, page 125, for calculation.)

d. Impacts on Parking[1]

The reserve capacity of the adjacent parking garages would be unable to absorb the number of vehicles estimated to be generated by the project, especially on peak days, when most central garages are already fully occupied.[2] The additional parking demand would therefore have to be satisfied in more distant parking facilities. The effect of this would be that shoppers in the Union Square area, on the average, would have to park further away (about one block) from the central shopping area. It is expected that most of the excess parking demand caused by the Neiman-Marcus project would have to be satisfied in the south of Market area.

In the long range, the increased parking deficiencies in the most central areas and the potential parking cost increases would tend to make people shift to other transportation modes or to other destinations where parking would be more convenient.

e. Impacts on Transit

Between 310 and 530 additional person trips would be generated on the MUNI buses and coaches on a Friday. These additional rides would be distributed over all the routes serving the Union Square shopping area, including the streetcars on Market Street. If all these additional riders entered the downtown area between 10 a.m. and 2 p.m., they would represent about 3.3% of the 10 a.m.-2 p.m. ridership on bus routes 1, 2, 3, 30, 30X, 38, and 45.[3] The average bus load on these bus routes would increase from about 51% to about 54.3% of seating capacity. If it is assumed that some patrons would use the streetcars, the additional transit riders would represent about 1.8% of 10 a.m.-2 p.m. ridership on all bus and streetcar lines serving the project area.

Most of the ridership increases would occur at off-peak periods when the transit system operates below its capacity.

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[1] See Appendix A, page 129, for a full discussion of parking demand and capacity.

[2] See Appendix A, page 129, for a discussion of parking garage capacity.

[3] San Francisco MUNI: Report of Traffic Checks, Volume Counts for Fiscal Year Ending 30 June 1976. No counts were included for routes 38X and 85, the shopper shuttle. The ridership counts were undertaken at Post and Powell, Stockton and Sutter and O'Farrell and Powell for routes 1, 2, 3, 30X, 38, and 45, and at Market and South Van Ness for the streetcars.

Adding 64% for the proposed Saks Fifth Avenue store and assuming that all additional riders entered the downtown area between 10 a.m. and 2 p.m., the cumulative impact of the proposed project and the proposed Saks Fifth Avenue store would be about 3.0% of the 10 a.m.-2 p.m. ridership on all streetcars and bus routes serving the Union Square area.

The estimated additional number of riders on the cable cars would be 40-60 for a Friday, and would occur at those periods when the cable cars are most heavily overloaded. The additional demand would represent about one-half of the maximum capacity of one cable car. Waiting times for a place on the cable cars would increase. If the additional demand from the proposed Saks Fifth Avenue store is included, the additional capacity requirement would be for about three-fourths of a cable car.

f. Loading and Unloading

No traffic impacts are expected from delivery and unloading. Most freight material would be delivered at a trucking dock connecting directly to the basement. This dock would be accessible from O'Farrell through Security Pacific Plaza and would be adjacent to the Liberty House loading docks. Traffic levels on this section of O'Farrell Street were observed (by the traffic consultant) to be lower than levels on Geary and Stockton streets. Although the frequency of freight deliveries would vary from day to day, the project sponsor estimates there would be about six to ten deliveries a day, most of which would occur between 7:30 a.m. and 9 a.m. No deliveries would be received after 3:30 p.m.

F. CLIMATE AND AIR QUALITY

1. Microclimate

As the proposed building would be approximately the same height as the existing structure (excluding the tower), no change in local shadow patterns would occur and effects on local windspeed would be expected to be imperceptible.

2. Air Quality

a. Construction Impacts

Implementation of the proposed project would result in a short-term increase in suspended particulate matter, during the construction phase, which would be a nuisance to pedestrians and businesses adjacent to the site.

b. Carbon Monoxide

Local effects. Roadside carbon monoxide (CO) concentrations (CO is the most common local air pollutant) were developed for existing conditions and for predicted conditions during operation of a Neiman-Marcus store. Concentrations caused by local traffic were estimated for meteorological conditions which restrict diffusion of CO (a "worst-case" condition).[1] A background factor of 27% of the local traffic contribution of this pollutant was added to the level resulting from local traffic, to account for upwind sources and to predict actual concentrations.[2] Traffic increases from the Neiman-Marcus project and the proposed Saks project were combined, in order to evaluate their cumulative effects. In predicting pollution emission rates, average speeds of 20 mph for the eight-hour average and 10 mph for the peak one-hour time period on Geary Street were assumed; on Stockton, average speeds of 10 mph and 7 mph were assumed for the eight-hour average and one-hour peak periods, respectively.

On a peak day, Neiman-Marcus customers are expected to generate 1,330 additional daily vehicle trips (665 coming and 665 going). The 450 to 550 employees would also generate new trips; up to 16% of the employees are expected to use automobiles.

Because of the shortage of and high cost of parking near the project site, employees would probably park south of Market Street and would not impact vehicular traffic levels near the site. This would also be true for a portion of the customers. For the air quality impact analysis it has been assumed as a worst-case condition that all patrons would use the Union Square garage, and that trips would be equally distributed on Stockton and Geary streets.

It has been assumed that auto trip generation from the Saks project would be 60% of that of the proposed project (see Appendix A. Transportation). The new trips generated by these facilities would occur mainly between 10 a.m. and 2 p.m. However, as a worst-case assumption, project traffic has been superimposed on the present peak one-hour and eight-hour traffic volumes to correspond with the averaging times for the federal standards for carbon monoxide. Peak one-hour trip generation by the two new buildings was assumed to be 25% of the total generation; this additional traffic was added to existing peak-hour traffic levels supplied by the EIR traffic consultant. Existing eight-hour traffic volumes were assumed to be 55% of the Average Daily Traffic (ADT), and it was assumed that all project-related trips occurred during the peak eight-hour traffic period (12 noon to 8 p.m.).

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[1] About 2 miles per hour wind (one meter per second) forming a 22 1/2-degree angle with the roadway, under stable atmospheric conditions.

[2] Vehicle pollution emission rates are taken from data supplied by the Bay Area Air Pollution Control District (BAAPCD), updated by the most recent EPA emission factors. BAAPCD, Guidelines for Air Quality Impact Analysis of Projects, Technical Services Division Information Bulletin, 1 June 1975; and Association of Bay Area Governments (ABAG) memorandum from Ron Wada to Mike Kim regarding Modifications to Baseline Emissions Inventory due to EPA's Supplement 8, 18 July 1977.

The results for worst-case meteorological conditions and the local traffic contributions are summarized in Table 4, page 65. The concentrations resulting from the local CO increases, plus the 27% background factor, result in levels which would be below present federal ambient air quality standards for CO (35 and 9 parts per million for the one-hour and eight-hour averaging times, respectively). Because of federal and state emission controls, improvement in CO levels is anticipated, with or without the proposed project. In the Bay Area this improvement is not predicted to last beyond approximately 1985, at which time increased traffic would begin to outweigh CO reductions related to emission controls.[1]

In summary, 1980 traffic from the two proposed projects would increase CO concentrations on Stockton and Geary streets by 0.7 and 0.1 parts per million during the peak one-hour and eight-hour traffic periods, respectively.

Regional effects. Regional effects are related to the vehicle miles traveled (VMT) associated with the proposed project. Average daily VMT have been estimated for the project assuming a total average daily increase of 780 vehicle trips (see Chapter IV. E. Transportation, page 56). An average one-way trip-length of 10 miles has been estimated by the transportation subconsultant.

Emissions estimates are based on emission factors[2] for an average trip speed of 25 miles per hour. Projected daily emissions estimates, together with estimated future regional emissions for the nine-county Bay Area are shown in Table 5, page 65.

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[1] Bay Area Air Pollution Control District, Source Inventory of Air Pollutants, 1973.

[2] BAAPCD, Guidelines for Air Quality Impact Analysis of Projects, 1975, updated with "Supplement 8" emission rate.

TABLE 4

Roadside Carbon Monoxide Concentrations Under Adverse Meteorological Conditions
(parts per million)

	Geary Street		Stockton Street	
	1-hour average	8-hour average	1-hour average	8-hour average
1978 (present)	3.6	0.7	4.3	1.4
1980 with project Neiman-Marcus and Saks Building	3.9	0.8	4.8	1.6
1980 without either project	3.3	0.7	4.1	1.5
Federal ambient quality standard	35.0	9.0	35.0	9.0

TABLE 5

1980 Daily Project-Generated and Regional Emissions
(tons/day)

	Project Automobile Emissions	1980 Regional Emissions[1]	
		San Francisco County	Bay Region
Carbon monoxide	0.24	300	2,500
Organics	0.03	95	950
Nitrogen oxides	0.06	68	750
Sulphur oxides	0.01	28	700
Particulates	0.01	18	200

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[1] BAAPCD, Source Inventory of Air Pollutant Emissions in the San Francisco Bay Area, 1973. It should be noted that these projections do not include the effects of implementation of the Air Quality Maintenance Plan (AQMP).

The additional emissions generated by the project would increase the pollutant burden in the region and degrade regional air quality; however, the increase in regional emissions would be at most 0.01%.

A recent study of future regional air quality[1] found that photochemical oxidant would be a persistent problem in the future, and that substantial reductions in hydrocarbon and nitrogen oxide emissions, which result in the formation of photochemical oxidant, would be necessary to attain the federal standard for photochemical oxidant in the Bay Area. The project would increase emissions of these pollutants, making attainment of the standard for oxidant more difficult, but the total increase would not be statistically significant in a regional context.

G. NOISE

1. Construction Noise

Project construction, including demolition of the existing structure and erection of the proposed building, would temporarily increase noise levels in the surrounding area. Typical demolition and construction noise levels are listed below:

Equipment Type	dBA at 50 feet
Air compressor	81
Backhoe	85
Bulldozer	87
Grader	85
Jackhammer (pavement breaker)	88
Truck	88

It is difficult to predict or describe the future noise environment during the construction period because of: (1) multiple demolition and construction operations, (2) variable noise levels generated by construction and demolition equipment and operations, and (3) the variation in proximity of equipment to noise-sensitive receptors.

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[1] Association of Bay Area Governments, Draft Environmental Management Plan, December 1977, adopted 10 June 1978 by the ABAG General Assembly.

The San Francisco Noise Ordinance[1] limits the noise emission of powered construction equipment, except impact tools, to 80 dBA at 100 feet. It also prohibits construction work at night (8 p.m. to 7 a.m.) if the noise emission from such work exceeds the ambient noise level by 5 dBA at the property line, unless a special permit is authorized by the San Francisco Department of Public Works. Both the intake and exhaust of impact tools including jackhammers, pavement breakers, and piledrivers must be muffled to the satisfaction of the Director of Public Works. This project would require no piledriving.

During construction of the proposed Neiman-Marcus store, equipment complying with the noise ordinance would still increase noise levels at adjacent buildings because of the buildings' proximity to the proposed construction site and the possibility of multiple pieces of equipment operating simultaneously. For example, one piece of equipment complying with the noise ordinance produces 80 dBA at 100 feet; an additional piece of equipment, producing equal noise, would add about 3 dBA, making the level about 83 dBA at 100 feet. Under "worst-case" conditions, with several pieces of equipment operating simultaneously on the site, the L_{50} would be about 86 dBA outside buildings across Geary and Stockton streets from the project site. This level of construction would result in as much as a 19-dBA increase along Geary Street and a 21 dBA increase along Stockton Street over the existing levels there. The L_{50} in the southeast quadrant of Union Square would increase as much as 14 dBA over the existing levels there. Maximum noise levels in the area would not increase over existing maximum levels generated by buses and trucks on Geary and Stockton Streets,[2] but the maximum or near-maximum levels would occur for longer periods out of each hour.

Inside buildings across Geary Street from the site, an average level of 65 to 70 dBA would result (assuming open windows for ventilation). A very loud voice effort would be required to communicate at distances of three to four feet. On the sidewalks opposite the site, someone talking would have to shout to be understood at a distance of two feet. An increase in the L_{50} of 19 or 21 dBA would be perceived as a quadrupling in loudness. The increase coupled with speech interference effects would be expected to provoke complaints.

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[1] San Francisco Municipal Code, Part II, Chapter VIII, Section 1, Article 29, 1972.

[2] Refer to Appendix B for a description of the existing maximum noise levels at the proposed building site.

Trucking of construction materials to and from the site should not cause an increase in noise levels over the existing bus and truck traffic noise in the area.

2. Project Operational Noise

The project is not expected to create a statistically significant increase in vehicular traffic volumes, so traffic noise in the area would not increase.

Mechanical equipment in buildings has caused increased environmental noise levels in other areas of downtown San Francisco. Mechanical equipment noise is regulated by the San Francisco Noise Ordinance, Section 2909, Fixed Source Noise Levels.[1] The project site and surrounding area are zoned C-3-R and C-3-G except for Union Square, which is zoned P. The P zoning district is not covered by the noise ordinance. In the C-3-R zoning district and the nearby C-3-G, equipment noise levels cannot exceed 70 dBA between the hours of 7 a.m. and 10 p.m. The building equipment would not operate between 10 p.m. and 7 a.m. If equipment noise were controlled so as not to exceed 60 dBA in the Park during the hours of operation, then the equipment noise would be inaudible except during lulls in traffic.

3. Compatibility of the Site for the Proposed Land Use

The criteria used to evaluate the suitability of the site for the project are contained in the City's Plan for Transportation Noise Control.[2] The criteria establish "Land Use Consequences" based upon the noise levels to which proposed projects would be exposed.

The proposed project falls within Land Use Consequence B, which states: "New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design."

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[1] San Francisco Municipal Code, Part II, Chapter VIII, Section 1, Article 29 (1972).

[2] Environmental Protection Element of the Comprehensive Plan of San Francisco, Figure 2, page 12, September 1974.

H. COMMUNITY SERVICES

Fire protection for the proposed project could be provided with no additional manpower or equipment necessary.[1]

No changes in requirements for police services or for police involvement are anticipated[2] as a result of the proposed project.

Demolition debris would be removed from the project site, and probably used for landfill at some Bay Area location currently requiring heavy fill material. The proposed project would generate approximately 1,750 pounds of solid waste per day.[3] The refuse would be trucked to a transfer station in South San Francisco and, following separation, would ultimately be deposited in the Mountain View Landfill site. This landfill site is considered viable until 1989[4] although the San Francisco contract with the landfill expires in 1983. The solid waste generated by the project would constitute approximately 0.04%[5] of the yearly amount of refuse accepted.

The proposed project is estimated to have a monthly water consumption of 560,000 gallons,[6] or 3.2 gallons per square foot of gross floor area per month. (For comparison, the water consumption for the proposed Saks Fifth Avenue on Union Square is estimated at 3.1 gallons per square foot per month, the Liberty House store uses about 2.0 gallons per square foot per month, and Macy's uses 3.1 gallons per square foot per month.)[7] Assuming that all the water used in the proposed building would eventually end up in the City's combined sewers, the 560,000 gallons of water per month would constitute approximately 0.0002% of the 65 million gallons dry weather flow per day at the North Point Treatment Plant.

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[1] Robert Rose, Chief, San Francisco Fire Department, telephone conversation, 7 October 1977.

[2] Charles Gain, Chief, San Francisco Police Department, letter, 14 October 1977.

[3] Based on 1 lb/100 sq. ft. of floor area per day, as stipulated in California Solid Waste Management Board Bulletin No. 2, Solid Waste Generation Factors in California, 8 July 1974.

[4] Santa Clara County Solid Waste Management Plan, 1975.

[5] Ibid.

[6] MaGill-Cloyd Engineers, Inc., Dallas, Texas, consultants for Neiman-Marcus.

[7] Theresa Peltier, Acting Supervisor of Consumer Accounts, San Francisco Water Department, telephone conversation, 17 August 1978.

I. ENERGY

All energy needs for the proposed project would be supplied by electricity (including the energy demands from the proposed restaurant). The connected electrical load is estimated to be 2,200 kilowatts.[1] Estimated monthly consumption for all electrical needs would be 250,000 kilowatt hours (Kwh) or 1.4 Kwh per square foot of total floor area (total floor area is 175,000 square feet). The maximum allowable energy consumption per square foot per year according to Title 24 of the California Administrative Code is 19.53 Kwh; the energy budget per year for the proposed store's gross conditioned floor area is 19.18 Kwh or approximately 200,000 Btu.[2] (For comparison, the energy consumption for Macy's Department Store is 2.4 Kwh per square foot per month.[3])

Anticipated daily and annual load distribution curves are found in Figure 23, page 71. The curves are based on inside temperatures of 78° F for cooling and 70° for heating. (Temperatures for heating in other department stores vary, but are 72° F to 74° F in many instances.) The monthly distribution curve shows that the highest demand for energy would be in the winter months between November and March, when some heating would be required. The peaks of the monthly consumption curve coincide approximately with the peak demands of the Pacific Gas and Electric Company (PG&E), which occur between November and January. The hourly consumption curve indicates that the electrical demand would rise after 9:30 a.m. prior to opening of the proposed store; by 10:00 a.m. the demand would have risen to 332 kilowatts, which

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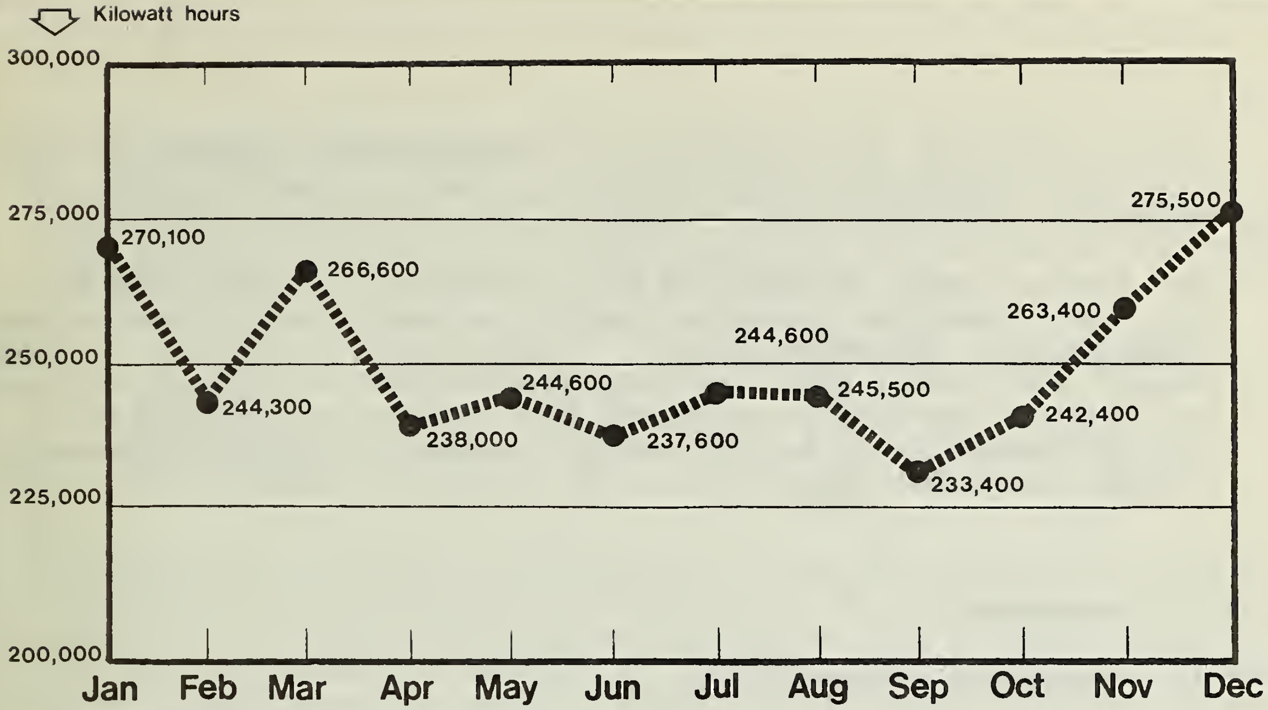
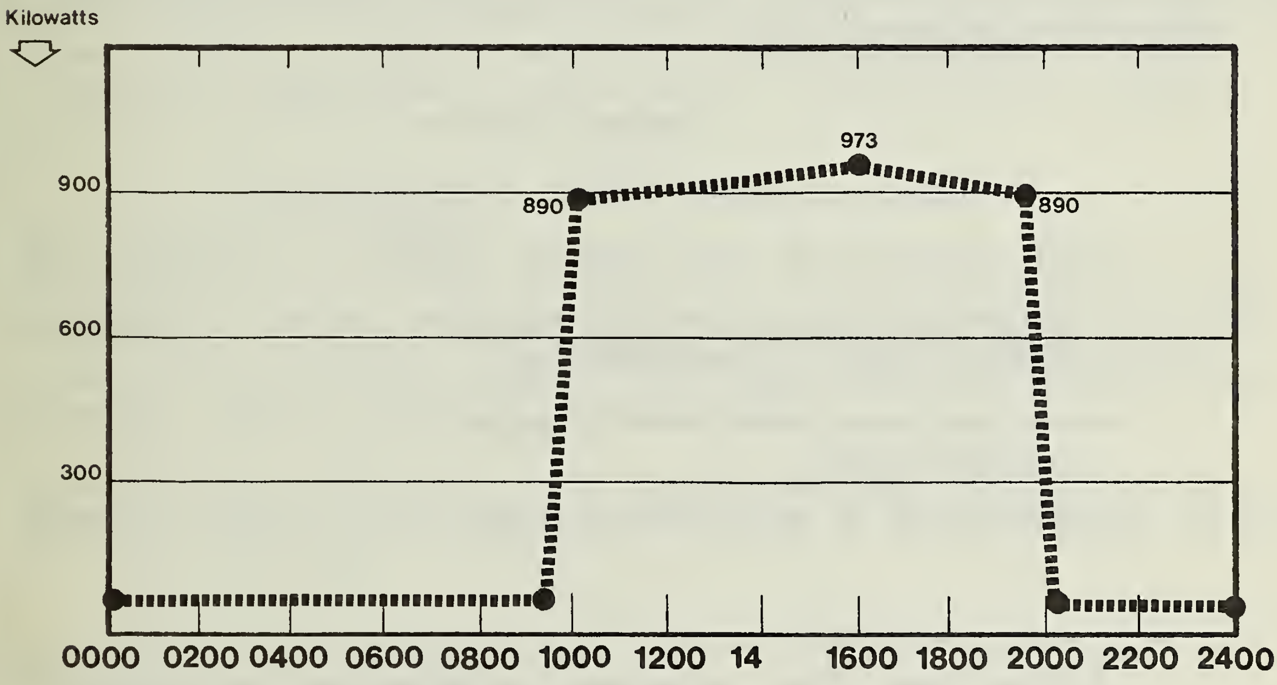
[1] George Cloyd, Magill-Cloyd Engineers, Inc., Dallas, Texas, telephone conversation, 26 September 1977.

[2] One Kwh is 10,239 Btu. This conversion factor incorporates generation and transmission efficiencies as defined in the Energy Conservation Design Manual for New Non-Residential Buildings by California Energy Resources, Conservation, and Development Commission, October 1977.

[3] Barbara Midzuno, Air Control, Macy's Department Store, telephone conversation, 8 September 1978.



Monthly Consumption



Hourly Consumption

Estimated Electrical Consumption

Figure No. 23

would translate into sufficient heating and/or cooling to make the store comfortable for customers from a climatic point of view.

The energy demand of 250,000 Kwh per month, or 3,000,000 Kwh per year, would be generated partly by hydroelectric power but predominantly by fossil fuels, a nonrenewable resource. If only fossil fuels were used, an estimated 18,000 gallons of oil would be required monthly to generate that amount of electricity. Energy demand for a single-family residential unit is approximately 1,200 Kwh per month, or 85 gallons of oil.[1]

J. ECONOMICS

1. Construction Employment

Employment during the estimated 16 months of construction would involve a maximum of approximately 150 persons. The labor cost would be about 50% of the building cost, or $5.7 million.[2] As shown in Table 6, about 250 person-years would be necessary to build the proposed store.

TABLE 6

Number of Person-Years of Construction

Total value of new improvements (1977$)	$11,300,000
On-Site labor share of improvements (50%) of cost of improvements)	5,700,000
Person-weeks of construction labor (at $438/week[3])	13,000
Person-years of construction labor	250

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[1] Brian Pace, PG&E, telephone conversation, 24 August 1978.

[2] James Floyd, Neiman-Marcus, personal communication, September 1977.

[3] Based on an average salary of $10.97 (including fringes) per hour (1977) for painters, cement-masons, carpenters, bricklayers, electricians, and general laborers. Joseph Preston, California Employment Development Department, Employment Data and Research, telephone conversation, 7 October 1977.

2. Permanent Employment

Permanent Employment for a typical year following completion of the proposed project is estimated at 450 on an average day and 550 on a peak day, broken down as follows:

	Average Day	Peak Day
Sales	270	330
Clerical	135	165
Managerial	45	55
	450	550

Currently 22 persons are employed in the 133-157 Geary Street building. It is anticipated that most of the shops would relocate to new stores or to other branch outlets, retaining some of the employees now working at 133-157 Geary Street. Magnarama, the former tenant of part of the City of Paris building, employed 11 persons.

Employment of minorities would be carried out in accordance with the Carter Hawley Hale Stores, Inc. Affirmative Outreach Program. The program is designed to recruit female and minority applicants for jobs in all categories, and to train and promote capable employees regardless of race, color, religion, sex, national origin, physical handicap, or age.

3. Municipal Revenues

Municipal tax revenues generated by the proposed project would include property, payroll, and sales taxes. Table 7, page 74, shows the estimated City revenues from the proposed project; the numbers in parentheses in the "San Francisco Revenue Share" column indicate current estimated revenues.

In addition, during the construction period, the City could expect payroll taxes from a labor cost of $5,700,000, or approximately $63,000.[1]

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[1] Based on payroll tax of 1.1%

TABLE 7

Estimated Annual Municipal Revenues

Tax Revenue Source	Estimated Annual Tax Revenue	City Share	San Francisco Tax Revenue Share	(current revenues 1977)
Property tax[1]	$ 270,000	58%	$156,600	($32,000)[4]
Payroll taxes[2]	42,900	100%	42,900	(3,000)[5]
Sales tax	1,755,000	15.4%[3]	270,000	(42,000)[6]
Total	$2,067,900		$469,500	($77,000)

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[1] For the computation of property tax revenue, it is assumed that the market value is equal to development cost ($27 million, 1977). It is further assumed that following passage of the Jarvis-Gann Initiative, the tax rate would be $1 per $100 assessed value.

[2] Payrolls are assumed as 14.5% of sales for the first year of operation, or 3.9 million dollars (1977). The payroll taxes are 1.1% (1977) of the gross payroll.

[3] Based on a sales tax rate of 6.5% (1977) for the State of California, of which 15.4% is returned to the City and County of San Francisco.

[4] The current assessed value of lots 14 and 15 is $1.4 million (1977); market value would be $5.6 million, of which 1% would be property tax (San Francisco Assessor's Office).

[5] Based on an average salary of $5.80 (1977) for 22 employees. Joseph Preston, California Employment Development Department, Employment Data and Research, telephone conversation, 7 October 1977.

[6] Amount of sales based on estimated $150 per square foot, and 28,000 square feet of sales area in the 133-157 Geary Street building.

4. Municipal Costs

Municipal expenditures such as street cleaning, fire protection,[1] sanitary sewage services,[2] and police services[3] are not expected to increase if the proposed project is implemented.

K. GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

When fully implemented, the proposed project would create a maximum of 550 jobs, 330 of which would be sales positions, 165 would be clerical and 55 would be managerial. Most of the clerical/sales workers are expected to come from San Francisco County. Managerial workers could also live in the East Bay and northern San Mateo and Marin Counties.

The proposed project is not anticipated to have any influence on the projected population growth pattern of the City. The store, however, could induce growth in the economy by increasing money spent in the City for tourist trade, the new employment positions, and by generating more public revenues from sales taxes, payroll taxes, and property taxes.

The expenditures from construction and permanent employment would result in a new secondary employment within the local economy. As new income is spent and re-spent within the regional economy, a multiplier effect would occur, whereby the actual amount of income generated in the economy would be greater than the initial income accruing to the region.[4]

The proposed project would add to the number of specialty stores in the Union Square area and could further induce the type of retail growth currently taking place. Some of the retailers adjacent to Union Square anticipate that more potential customers would be attracted to the area by the proposed project (and the Saks Fifth Avenue store) and the increased trend in sales would continue.[1] Other retailers are not certain of the growth-inducing impacts of additional stores.[2]

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[1] Robert Rose, Chief, San Francisco Fire Department, telephone conversation, October 1977.

[2] T. Landers, Bureau of Sanitary Engineering, San Francisco Department of Public Works, telephone conversation, 6 September 1978.

[3] Charles Gain, Chief, San Francisco Police Department, letter, 14 October 1977.

[4] The quantification of the multiplier effect could be about 1.3 times the projected annual sales of $11.4 million (first year) using State Department of Water Resources 1967 Input-Output model. Multipliers for the City of San Francisco, per se, are not available for this study.

When the City of Paris Department Store closed in 1972, neither Macy's nor I. Magnin noticed any effect on their sales for several reasons: The City of Paris' inventory was not competitive, its customers may not have patronized other stores, and annual sales near the time of closing were just a fraction of the total at other Union Square department stores.[1,2]

L. COMMUNITY CONCERNS

Several community groups have expressed interest in the proposed project. Their attention has focused primarily on retention of the City of Paris building and on the proposed design for the Neiman-Marcus store.

The Heritage Foundation, primarily a preservationist group, has taken the position that the City of Paris building is worth preserving.[3] The Foundation has pointed out[4] that the City of Paris building is included in the National Register of Historic Places and that it is mentioned in Here Today.[5] The reason for the building's inclusion in the National Register and its mention in Here Today was based on the architectural importance of the building's exterior as well as the interior space formed by the Rotunda and art glass dome. The Foundation has not taken a position on the proposed building.

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[1] William Wittick, Vice President of Administration and Control, I. Magnin, telephone conversation, 28 August 1978.

[2] Joel Esquith, Controller, Macy's Department Store, telephone conversation, 29 August 1978.

[3] Letter to EIP from Robert Berner, Executive Director, The Foundation for San Francisco's Architectural Heritage, 14 August 1978.

[4] Meeting between EIP staff and Robert Berner, Heritage Foundation, 31 August 1977.

[5] Junior League of San Francisco, Inc., Here Today: San Francisco's Architectural Heritage, San Francisco Chronicle Books, 1975.

The Citizens' Committee to Save the City of Paris Building[1] would like the building preserved in toto, as the proposed project would interrupt the pedestrian environment now provided by the continuous windows on Geary Street from Kearny Street to Union Square. Furthermore, the Committee contends that demolition of the building would eliminate what it considers one of the five great architectural interior spaces in San Francisco (nongovernmental and nonreligious).

The Committee investigated alternative uses of the existing building. One such alternative would entail one-tenant occupancy of the first several floors, and occupancy of the remaining floors by a number of smaller boutiques. Another alternative would be a combination hotel/Neiman-Marcus specialty store. The Committee has also offered suggestions for restoration of the existing building and construction of a new building at 133-157 Geary for use as a Neiman-Marcus specialty store. This alternative is discussed in Chapter VII. B., page 92.

The San Francisco Planning and Urban Renewal Association (SPUR) has stressed that the design of any building in the prestigious Union Square area should not imitate a flat, windowless suburban shopping center-style department store.[2] SPUR feels the design of the proposed project, including incorporation of the Rotunda and art glass dome from the existing City of Paris building, shows sensitivity to the existing environment of Union Square, considering the limitations governing construction with modern materials.[3] This position was reiterated in a recent SPUR report which stated that the proposed structure will undergo discretionary review by the Planning Department, "which will further enhance its prospects for becoming an attractive and compatible new neighbor in Union Square."[4]

The board of directors of San Francisco Beautiful has unanimously approved the design of the proposed project as compatible with the environment of Union Square. The group feels San Francisco should be as cooperative as possible with the needs of Neiman-Marcus, to encourage the company to open a branch store in the

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[1] Meeting with EIP staff and Hal Major, Citizens' Committee to Save the City of Paris Building, 8 September 1977.

[2] "Economics and Aesthetics in Union Square," SPUR Report No. 109, May 1975.

[3] John Jacobs, Executive Director, SPUR, telephone conversation, October 1977.

[4] "Neiman-Marcus Will Enhance the Vitality of Union Square," SPUR Report No. 143, July 1978.

City. It feels the economic and visual environment of the City would be greatly enhanced by the proposed project.[1]

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[1] Mrs. F. Klussmann, San Francisco Beautiful, personal communication, October 1977.

CHAPTER V
MITIGATION MEASURES

A. HISTORICAL

Incorporated into the design of the proposed project is the retention of the Rotunda and art glass dome to partially mitigate the loss of the City of Paris building.

Retaining the entire City of Paris building would mitigate the loss of a historic structure; however, this mitigation measure would not be compatible with the design criteria put forward by the project sponsor for a Neiman-Marcus store. See Chapter VII, page 92, for discussion of this alternative.

The project sponsor will document the Rotunda, skylight, and art glass dome by drawings and photographs within four weeks before demolition. Demolition of the existing building would be further mitigated by documentation of the entire building prior to demolition, using Historic American Building Survey standards.[1]

B. URBAN DESIGN

A stronger visual relationship between the proposed building and other lighter-colored structures facing Union Square would be achieved if lighter-colored granite squares were used to face the building. Less color contrast between the proposed structure and the I. Magnin building across Stockton Street would exist if this measure were implemented. Architects for the proposed project, Johnson/Burgee, have indicated that the light-colored (Swenson Pink) granite squares are of the lightest color available in the pink-beige color range and that the darker (Regal Red) granite squares would be selected to contrast with the lighter-colored granite squares.[2] A lighter appearance could be achieved by use of white, off-white, or beige with the proposed Swenson Pink (pink beige) granite. This would preserve the warmth of the pink tone while lightening the appearance of the proposed building. Project architect and project sponsor prefer the darker Swenson Pink/Regal Red combination.

Show windows at street level, in addition to the six proposed, would create a more active-looking pedestrian environment and lessen the contrast in window placement between the proposed structure and other buildings facing Union Square. Project architect has stated:

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[1] U.S. Department of Interior, Office of Archaeology and Historic Preservation, Historic American Building Survey, Field Instructions for Measured Drawings, 1977.

[2] Letter to Environmental Impact Planning Corporation, 22 September 1978.

> "We have provided maximum glass area at the street level considering the need to provide seismic structure in the wall along Stockton Street and the desire to enclose the restored City of Paris dome with glass so that it is visible from Union Square. Only approximately 42% of the building at street level is solid, and there is no solid section longer than 50 feet. We feel that this fulfills the City's desire to break up the street frontage, particularly the areas facing Union Square."[1]

Improved visual variety would be achieved if greater attention were given to surface detailing of the face of the proposed building. The building's size would visually appear to be scaled down to relate more directly to the pedestrian environment. Surface detailing would offer the opportunity for shadow patterns to occur under different strengths and location of light sources. The project architects specify that further carving or shaping of the two-foot granite squares proposed for the building's exterior surface would increase construction costs to the point where the use of granite would be prohibitive.[2]

Design mitigation measures could be required by the Planning Commission Discretionary Review process which will take place after certification of the EIR for the proposed project.

C. TRANSPORTATION

1. Construction Mitigation Measures

The most effective measure to mitigate traffic and circulation impacts created by project construction would be timing construction activities so they would not coincide with peak traffic and pedestrian densities. This measure could include daily, weekly, and yearly timing strategies. On a daily basis, scheduling of construction vehicle activity prior to 4 p.m. would be preferable. On a weekly basis, Fridays and Saturdays should be avoided, because shopping traffic is generally highest on these days. The possibility of scheduling construction on Sundays should be investigated. On an annual basis, the most congested period at the site is between Thanksgiving and New Year's Eve and would represent the period of worst construction impacts. It should be noted that any period of time during which construction were restricted would extend the projected 20-month demolition-construction period proportionately and cause excessive premium time which would be unacceptable to the project sponsor.

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[1] Letter to Environmental Impact Planning Corporation, 22 September 1978.

[2] Ibid.

The project sponsor would comply with the daily scheduling mitigation measure but has not agreed to avoid or reduce construction activities on Fridays and Saturdays. No construction would be scheduled on Sundays. The project sponsor also intends construction to proceed during the Thanksgiving-New Year's Eve period.

During the construction period, a barricade would need to be erected around the project site. The impacts on pedestrians could be mitigated by placing temporary sidewalks around the construction barricades on Stockton and Geary streets. The position of these temporary sidewalks would depend on the final position of the construction barricades. If the barricade extended into the curb-lanes, but did not take their full widths, then the temporary sidewalks could use the remaining widths of those lanes without further impacts on traffic movement than would be caused by the barricades themselves.

If temporary sidewalks could not be erected due to lack of space, then signs could be posted on Stockton Street at O'Farrell Street and on Geary Street at Grant Avenue indicating that the sidewalks were closed at the other end of the block. This would allow pedestrians to cross Stockton and Geary streets one block from the project site rather than crossing mid-block in the absence of crosswalks at the start of sidewalk closures; both these measures would have to be approved by the Department of Public Works following application from the project sponsor.

During the construction period the flower stand would need to be relocated. Potential temporary locations for the flower stand would be on Stockton Street south of the project site, on Geary Street, or on the northwest corner of Stockton and Geary intersection on the pathway leading into Union Square. This location would be preferable, as it would not reduce existing sidewalk space on Stockton and Geary streets, yet the stand would remain accessible to potential customers. Any relocation of the flower stand would require a change in the operating license issued by the Board of Supervisors, through the Department of Public Works, for this type of street vending.

2. Operational Mitigation Measures

After project construction, pedestrian circulation could be improved on the east side of Stockton Street, if the flower stand just south of the Geary intersection were permanently moved to a location with lower pedestrian densities. The flower vendor would oppose such a move as he considers his present location and exposure to pedestrians necessary for optimum sales.[1]

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[1] Conversation with John Murdoch, flower stand vendor, Tuesday, 15 August 1978.

The most effective measure for improving existing and projected pedestrian circulation would be to increase the green time phases of the traffic lights at the Geary and Stockton street crosswalks. Pedestrian green time could be increased from the existing 15 seconds to 27 seconds, the present duration of the green phase for parallel vehicle movement. This measure would increase the available green time for pedestrians by 80%, and reduce pedestrian densities at the crosswalks by 45%. To minimize conflicts between vehicles turning left from Geary Street into Stockton Street and pedestrians crossing Stockton, a flashing light could be installed to warn the left-turning vehicles. Lengthening the pedestrian green phase also would alleviate crowded conditions on the corner itself by decreasing accumulation time, thereby decreasing the number of people waiting for the green light at any one time. This mitigation measure would not worsen traffic conditions, with one exception; it might reduce the number of vehicles making, or able to make, a left turn on red from Geary into Stockton. Widening the crosswalks would also improve pedestrian conditions at the crossings.

To further improve existing pedestrian levels of service, sidewalks could be widened at the Geary-Stockton intersection. Enlargement of the width of the parking lane, at the pedestrian crossings, would increase the space available for pedestrians to gather and circulate at the corner. This measure would decrease crossing distance and time, and improve pedestrian safety.

The locations at which such a measure could be implemented are limited, however. The curb lane on the north side of Geary at Stockton is a bus-only lane between 4 p.m. and 6 p.m., which would prevent widening of the sidewalk there. The curb lane on the south side of Geary Street is now generally used for loading and parking but is a tow-away lane during the evening peak (4 p.m.-6 p.m.). Extension of the corner sidewalk at this location would reduce the evening peak hour capacity of Geary Street from three to two lanes. Similarly, both curb lanes on Stockton between Geary and O'Farrell are tow-away lanes during the evening peak, and corner sidewalk extension on either side would remove one lane from evening peak hour service.

The sidewalk could be widened, however, on the west side of Stockton Street immediately south of Geary Street, by the width of the parking lane, without reducing the effective street width.[1] This is because the corresponding lane directly north of the intersection is a right-turn lane from Stockton Street onto Geary Street; thus, no lane north of the intersection feeds directly into the western curb lane south of the intersection. Peak traffic southbound on Stockton Street, wishing to use the west curb lane south of Geary Street, must transfer into the lane after the Geary intersection. For the remainder of the day, this lane is unavailable to moving traffic because of parked delivery vehicles.

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[1] Effective street width is the width available for moving traffic.

These suggested changes in sidewalk and crosswalk widths, and signal timing, would be subject to approval by the Department of Public Works of the City and County of San Francisco. The sidewalk changes would have to be reviewed for conformity to the San Francisco Comprehensive Plan by the City Planning Commission. Funding would have to be obtained from either City sources or the project sponsor.

The project sponsor would support, in principle, all the operational mitigation measures described above and would cooperate, if required, with the Department of Public Works in an analysis of the feasibility and/or necessity of each measure. The sponsor's final decision as to these measures would be made following the Department of Public Works' decisions on the overall cost and effectiveness of the measures, and following the sponsor's own assessment of benefits to the proposed project. Further, the sponsor's decision would be based partly on the amount of funding expected from Neiman-Marcus.

3. Transportation Mitigation

Parking and traffic impacts could be further reduced by strategies encouraging shoppers to use public transit modes. Ideally, any such strategies should be implemented by all stores in the Union Square area. Special advertising and marketing could be undertaken by the stores and transit districts to achieve this objective. Stores might, for example, distribute special free bus and BART tickets to customers. This measure would be especially important on peak days, when roads are congested and parking facilities full. The project sponsor would not undertake such a measure, although it intends to post bus schedules and other promotional transit literature on bulletin boards in the store.

Neiman-Marcus has indicated it would encourage car- and van-pooling programs among employees. Although it is estimated that the traffic impact of project employees would not be measurable (see Appendix A, page 129), such programs would contribute to the City of San Francisco's general goal[1] of reducing automobile commuter traffic into the downtown area. Neiman-Marcus would provide support for pooling activities, such as producing lists of names by zip code so potential car poolers could identify each other.

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[1] The Comprehensive Plan: Transportation Element. City and County of San Francisco, Department of City Planning, 1972.

Neiman-Marcus also has expressed willingness to act as an intermediary in the establishment of van-pooling programs for employees, such as "RIDES."[1] "RIDES" is a nonprofit, publicly funded corporation which promotes ride-sharing in the Bay Area, and leases vans to groups of commuters who pay monthly fares, based on distance traveled and number of riders. Neiman-Marcus would investigate the benefits to employees and communities from car- and van-pooling programs and evaluate employee responses before deciding on the implementation of such a scheme.

The impact of freight deliveries could be reduced by scheduling deliveries at other than morning and evening peak hours. Neiman-Marcus is not willing to restrict deliveries to between the hours of 7:30 a.m. and 9 a.m., as the delivery vans are not under its ownership or control, but it estimates most deliveries would be made during those hours. It will, however, stop receiving goods at 3:30 p.m., so deliveries would not occur during the evening peak.

D. AIR QUALITY

Watering is the normal method of dust control on construction sites. The San Francisco Building Code requires that measures be taken to reduce dust generation, specifically watering down demolition materials and soils. An effective watering program (complete coverage twice daily) could reduce emissions by about 50%. Other control measures include:

- scheduling of major dust-generating activities in the early morning when winds are low.
- construction phasing such that major earthmoving and demolition activities occur during late fall, winter and early spring months (when soil has maximum moisture content).
- physical covering of storage piles.

Neiman-Marcus would agree to the incorporation of all the above measures in the construction of the project as long as no material delay in the construction program would result.

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[1] RIDES for Bay Area Commuters, Inc.

E. NOISE

1. Construction Noise

Neiman-Marcus will have as a specification in the construction contract, that the contractor shall meet the San Francisco Noise Ordinance limits on construction equipment noise. Additionally, the contractor should be encouraged by the project sponsor to be a "good neighbor" through use of technically feasible and economically reasonable noise control measures. The Noise Ordinance is normally enforced by City staff if citizen complaints are received. If the contractor persisted in violating the Noise Ordinance, the City could withdraw the building permit.

2. Operations Noise and Land Use Compatibility

In order to comply with the San Francisco Noise Ordinance and not to exceed 60 dBA in Union Square, the following measures would be incorporated into the design of the proposed project:

a) properly sized equipment, so that it would not be operating in a noisy mode

b) specification of "quiet" equipment, with applicable noise limitation to be met by the manufacturer; this may involve an alternate mechanical process which emits less noise

c) silencers, attenuators, isolators, barriers, or other devices to control noise emissions

A detailed analysis of the noise reduction provided by the proposed building's facade would be made, consistent with the recommendation of the City's Plan for Transportation Noise Control. The purpose of this analysis would be to show that the intrusive noise from traffic would not exceed an acceptable sound level inside the building. A report, readable by a lay audience, would be submitted to the Office of Environmental Review in the Department of City Planning when the design of the building is completed, explaining what noise control measures are included and what interior noise levels and community noise levels are expected after the building is in operation. A second report, containing actual noise measurements, would be submitted within one month after the building opens for business, showing whether or not the projected noise levels were exceeded.

F. COMMUNITY SERVICES

The project sponsors have developed a Fire and Life Safety Program to provide protection which is equivalent to that required by the San Francisco Building Code.[1] The program includes fire protection measures for the building proper, and for the Rotunda and atrium. The prominent features of the program are: an automatic sprinkler/standpipe system having two-source water supply, electrically monitored to detect disruption to the system; closed-head sprinkler systems[2] to protect the display case area in the atrium; heating, ventilating and air conditioning (HVAC) smoke-control system; smoke exhaust for the atrium; and a direct link to an alarm service in the City for fire and supervisory signals. The Rotunda has been given special attention, since large vertical openings inside buildings can enhance the spread of fires. The Rotunda and the atrium are proposed to be surrounded by sprinklers, smoke detectors, and return-air openings, which "inhale" the smoke-filled air; further, mechanical venting would be located in the atrium at the top of the Rotunda to expel the smoke from this area.

On 7 February 1978, the Board of Examiners approved the Fire and Life Safety Program outlined by the project sponsors with some additions, including side wall sprinklers at all levels around the Rotunda, emergency fire pumps, and seismically-resistant restraints for the emergency system.[3]

The Board of Examiners consists of six members qualified by experience and training to hear matters pertaining to building design and construction. They determine whether or not variances from requirements of the San Francisco Building Code should be approved for specific cases.[4]

Incorporated into the design of the proposed project is the use of trash compactors to reduce the volume of solid waste. Trash compactors generally can reduce the volume of waste at a ratio of

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[1] Rolf Jensen & Associates, Equivalency Study of Proposed Fire Protection and Life Safety Program for Neiman-Marcus Store, San Francisco, California; presented to San Francisco Board of Examiners on 16 January 1978.

[2] A closed-head sprinkler system has a heat sensor on each sprinkler head.

[3] Letter to Norm J. Kornsand, P.E., Rolf Jensen & Associates, from Robert C. Levy, Secretary, Board of Examiners, 7 February 1978.

[4] Further discussion of the jurisdiction of the Board of Examiners can be found in San Francisco Building Code Section 204.

4 to 1,[1] and in the proposed project would be in operation less than 30 minutes per day.[2] The energy consumption of compacting and transporting solid waste to the San Francisco transfer station would be approximately one-third of the energy consumed in transporting uncompacted solid waste. Recycling of paper waste materials is recommended and is being considered for the proposed project by the project sponsors.

All faucets for the proposed building would be equipped with flow-restricting devices. Toilets installed would be low-flush types, using less than 3½ gallons per flush.

G. ENERGY

The energy consumption levels for the proposed building would conform to Title 24 of California Administrative Code, Article 2, regarding Energy Conservation Standards for New Nonresidential Buildings; the standards apply to construction initiated following 1 July 1978. Mitigation measures incorporated into the design of the proposed building to reduce energy consumption include using double-pane glass at the Rotunda, and elimination of the previously proposed skylight over the escalator atrium.

The energy consumption is based on an estimated 78°F cooling and 70°F heating. If 68°F were used for heating, the energy consumption for heating could be reduced by 10%-15% for the proposed project.[3]

The HVAC System would be controlled by 40-50 thermostats distributed throughout the building. The ventilation system would be equipped with a "100% vent cycle" that allows use of outside air for air conditioning if the outside air were below the desired temperature inside the building.

A lighting control system would be used in the proposed building; there would be three different levels of lighting: fluorescent lights would be in operation for maintenance personnel using the building outside of regular customer hours; prior to opening, incandescent lights would be turned on at a reduced level; and not until the opening of the store would full lighting be provided. Each office would have light switches so that when the offices were not occupied, lights could be turned off.

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[1] Angelo Devincenzi, Golden Gate Disposal Company, telephone conversation, 7 September 1978. George Marshall, Blackwelders' Compactors, Rio Vista, telephone conversation, 8 September 1978.

[2] George Cloyd, MaGill-Cloyd, Engineers, Inc., Dallas, Texas, telephone conversation, 24 August 1978.

[3] Ibid.

CHAPTER VI
ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

A. HISTORICAL

Implementation of the proposed project would result in demolition of a State Historical Landmark building which is also on the National Register of Historic Places.

B. URBAN DESIGN

The proposed project would not conform to Conservation Policy 5 of the Urban Design Plan which calls for remodeling of older buildings to enhance their original character. The Rotunda would not clearly define a visual terminus for Union Square. The facade of the proposed building would contrast with the formal design of most of the surrounding buildings. Placement of windows would contrast with the symmetrical window placement in other buildings facing Union Square. The design of the building's exterior would relate to a scale larger than that of the pedestrian environment.

C. TRANSPORTATION

During construction, the sidewalk on Geary and Stockton streets would be fully or partially blocked by a barricade, requiring diversion of pedestrian flows to alternative routes. Trucks hauling demolition debris from the site to a location outside San Francisco would temporarily increase the volumes of traffic during the demolition period. After the Neiman-Marcus store opened, pedestrian flows on the sidewalks and crosswalks immediately around the proposed store would worsen. Vehicular traffic into downtown San Francisco would increase slightly with 780 trips generated on an average Friday, and 1,330 trips generated on a peak Friday.

D. AIR QUALITY

Even with implementation of control measures, construction activities would produce a temporary increase in dust generation, resulting in a short-term nuisance to downwind businesses and pedestrians.

E. NOISE

During construction, the "worst-case" condition (i.e., several pieces of construction equipment operating simultaneously) would result in a 19 dBA increase along Geary Street and a 21 dBA increase along Stockton Street. The L_{50} in the southeast quadrant of Union Square would increase by 14 dBA over the existing level. Within buildings across Geary Street from the site, an average of 65 to 70 dBA would result (assuming open windows for ventilation).

F. ENERGY

Operation of the proposed store would consume approximately 3,000,000 Kwh of electricity per year, to be generated predominantly from non-renewable fossil fuels.

CHAPTER VII
ALTERNATIVES TO THE PROPOSED PROJECT

A. NO-PROJECT

Under the no-project alternative the existing buildings would remain, present site use would continue, and new uses would probably occur. The currently unoccupied City of Paris building, with its six floors and basement, has a total 130,300 square feet of floor space. The 133-157 Geary Street building, with about 112,000 square feet distributed over a basement and eight floors, has leased about 28,000 square feet to four retailers; present occupancy is thus 25% of total available area.

The two buildings are under-utilized at present occupancy, not only in percentage of occupied area, but in building usage. The now empty City of Paris building was occupied until the spring of 1978 by Magnarama (of Joseph Magnin), a discount merchandising operation for items which moved slowly at other Joseph Magnin stores. Current tenants of the 133-157 Geary Street building include four stores: a musical instrument store, and clothing, shoe, and candy stores. All tenants have other stores elsewhere in the City. No attempt has been made by the project sponsor to find tenants to occupy vacant parts of the buildings, because the intent of Carter Hawley Hale Stores, Inc., has been to use the project site for a Neiman-Marcus specialty store in a new building.

If the no-project alternative were implemented, there would be no construction disruption, no noise, no dust-generating construction traffic, and no other related impacts. The City of Paris building's facade and its relationship to Union Square would remain with this alternative. The display windows on the pedestrian level of Geary Street, which contribute to an uninterrupted showcase element from Kearny Street to Union Square, also would remain. The windows along Geary and Stockton streets are currently unused; if the no-project alternative were implemented, new tenants probably would use the showcase windows to exhibit merchandise.

As it would be uneconomical for Carter Hawley Hale Stores, Inc., the parent company of Neiman-Marcus, to continue ownership of the existing property under the no-build alternative, it is likely that the company would sell the City of Paris and the 133-157 Geary buildings. If Carter Hawley Hale were to sell the buildings, the company would experience a financial loss.[1] Following the sale, some other use of the site would eventually result.

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[1] John Caldecott, Attorney, Carter Hawley Hale Stores, Inc., telephone conversation, 8 December 1977.

B. RETAINING THE CITY OF PARIS BUILDING FOR RETAIL USE BY NEIMAN-MARCUS

1. Restoration of City of Paris Building, Retaining Existing Six Floors, and Construction of a New Structure at 133-157 Geary Street.

Neiman-Marcus originally intended to retain the City of Paris building. The company's position is summarized in Mr. Stanley Marcus' testimony before the Landmarks Preservation Advisory Board (5 June 1974):

> "When we purchased this location we were under the impression that we were going to be able to retain the original building, and it was only after investigation, both of a preliminary and then of an engineering nature, that we were forced to the conclusion that the building would be unsafe under certain earthquake conditions, it would make it unsafe for people and we came to the conclusion that we have to erect a new building."

The City of Paris building does not meet seismic safety requirements of the current San Francisco Building Code. The building suffered major damage in the 1906 earthquake, the south and east walls collapsing almost totally, together with the interior structural frames and floors. Plans[1] filed with the City in 1906 are incomplete, but do show that the entire interior frame of the building was rebuilt using the same type of construction as in the 1896 building. The size of the Rotunda, however, was changed (the former, precise dimensions of the Rotunda are not known), requiring new column spacing and new footings under new columns. The building's structural steel frame was designed in 1906 to support the vertical loads of the building and its contents. As was typical at the time, no provision was made in the building design specifically to resist lateral earthquake forces.[2]

When more than 30% structural alteration is done on a building which does not comply with the San Francisco Building Code, the entire structure must be brought up to the requirements of the present-day Building Code.[3] The San Francisco Bureau of Building

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[1] Building Plans on file with the Central Permit Bureau, Bureau of Building Inspection, City of San Francisco. Permit #6393 filed 29 November 1906.

[2] Sexton, Fitzgerald & Kaplan, Engineers, "Structural Investigation of the 'City of Paris' Building", Geary and Stockton Streets, San Francisco, California, 4 April 1974.

[3] San Francisco Building Code, Article 1, Section 104.B.1.

Inspection has determined that the reconstruction of the City of Paris building following the 1906 earthquake constituted the allowable 30% structural alterations.[1] Therefore, restoration of the City of Paris building would require bringing the building up to Code. Restoration would include structural alteration of walls and partitions, parapets, handrails around the Rotunda, ceilings, and floor and roof slabs; it also would require safety measures to ensure minimal hazards below the art glass dome. The new building at 133-157 Geary Street would need to be structurally tied to the City of Paris building to provide north-south earthquake resistance.[2] While no cost figures have been developed for this alternative, it has been estimated that bringing the building up to Code would cost more than construction of a new building on the site.[3]

The structural report on the City of Paris building states:

> "Except at rather extraordinary cost, we see little hope in the preservation of the historical value of this building within the concept of a high-use building. Indeed, even if allowed to stand empty, the building would remain as an impending menace to those on the sidewalk, below.
>
> "While it can be argued that many buildings in San Francisco fall in this category, we see little justification in the deliberate continuation of the life of the building but for its contribution to the architectural heritage of this lovely city. At the same time, we do recognize the importance of the preservation of such buildings and would energetically bring our full experience and talent to bear on that goal should this course of action be deemed warranted."[4]

Neiman-Marcus has rejected this alternative because of the aforementioned structural problems, and because restoration of the building using the existing number of floors would not meet a number of the firm's design standards for merchandising.

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[1] Letter to Philip Johnson from Robert C. Levy, Superintendent, Bureau of Building Inspection, 30 January 1978.

[2] Skilling, Helle, Christansen, Robertson, Consulting Structural and Civil Engineers, City of Paris Building, A Structural Analysis for Johnson/Burgee Architects, 20 July 1977.

[3] Joe Sexton, Structural Engineer, telephone conversation, 29 September 1978.

[4] Skilling, _et_ _al_., _op_. _cit_.

The floor to ceiling heights required by Neiman-Marcus are 16 feet for the first floor, and 12 feet for the remaining floors; in addition, each floor would need a 5½-foot ceiling cavity to house structural work, air conditioning ducts, sprinkling system, electrical wiring, and plumbing. Thus, floor-to-floor height requirements are 21 feet 6 inches for the first floor and 17 feet 6 inches for the remaining floors. The existing City of Paris building has the following floor-to-floor heights:

Floor Number	Floor-to-Floor Height
1	19' 9"
2	16' 3"
3	14' 3"
4	13' 7"
5	14' 3"
6	11' 7"

The existing floor-to-floor heights, therefore, could not accommodate the specified Neiman-Marcus height requirements.

It has been suggested that the height of the ceiling cavity could be reduced by the use of natural air conditioning to achieve air motion within the existing building. This would be accomplished by opening windows on the Geary Street and/or Stockton Street sides of the building, and by incorporating openings above the skylight of the existing Rotunda. A "chimney effect" in the Rotunda would induce airflow.

The purpose of air conditioning is the simultaneous control of heating, cooling, dehumidification, and air filtration to achieve a stable interior environment. These results would not be attainable using windows as the air source in the City of Paris building. Because airflow into the building is a function of the differential pressure between inside and outside, the air circulation rate required by the San Francisco Building Code could not be continuously maintained with such a method.[1] Furthermore, Neiman-Marcus design requirements involve placement of stockrooms on the perimeter of the floor, separated from the sales floor area by a floor to ceiling wall. This wall would block air circulation to the interior of the building.

Neiman-Marcus could not achieve its desired floor layout in the existing building. The large cavity of the Rotunda would limit the possibilities for locating departments and for displaying merchandise in a manner satisfactory to Neiman-Marcus. The location of escalators centrally within the building would be difficult. The positioning of escalators and their relationship to specific departments which rely on impulse-buying is an important issue which could not be resolved, given the current layout of the City of Paris building. Column spacing in the existing building would inhibit an overview of each floor, and would also limit layout of individual departments, although some columns which are not structurally supporting could be removed. If the existing building were to be retained, the entrances to the City of Paris building on Geary Street and Stockton Street would remain where they are. This also would restrict the ability to achieve the required Neiman-Marcus department layout.

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[1] Letter to Phil Pitts from George Cloyd, 12 September 1978.

If this alternative were implemented, assuming that aforementioned design problems could be resolved, a building listed as a State Hsitorical Landmark and registered on the National Register of Historic Places would not be demolished. The construction impacts would be less severe because only one building would be removed and restoration of the City of Paris building would take place behind the facades fronting Geary and Stockton streets. With the inclusion of a new building at 133-157 Geary Street, it should be possible to achieve the same floor area as that of the proposed project. Carter Hawley Hale believes that this alternative would generate fewer sales because the store layout would not be as effective as that for the proposed project. This would mean less traffic generation, and less sales would generate less tax revenues for the City.

2. Restoration of the City of Paris Building Using Four Floors, and Construction of a New Structure at 133-157 Geary Street

This alternative would encompass redesign of the interior of the City of Paris building, retention of its facade, and construction of a new building at 133-157 Geary Street to link with the City of Paris building. In order to achieve desired floor-to-floor heights, the total number of floors would be reduced from the existing six floors to four, as with the proposed project.

Redesigning the City of Paris building would require shoring up of outside walls, dismantling of the Rotunda, removal of the existing floors, and reconstruction of the interior. The Rotunda would remain in its present location.

As with the previous alternative, the City of Paris building and the new building at 133-157 Geary would have to be designed to the structural requirements of the San Francisco Building Code.

Although this alternative could provide floor-to-floor heights and column spacing in conformance with Neiman-Marcus height requirements, Neiman-Marcus has rejected this alternative because of the aforementioned structural problems, and because its other design criteria would not be met. The location of the Rotunda and entrances into the store would restrict desired department location and visibility of merchandise.

Furthermore, the new floor heights would not be compatible with the present placement of the building's windows. Windows now correspond to the existing six floors; if only four floors were constructed, nearly four feet of the windows at the second and third floors would be blocked by the new floor division.

If this alternative were implemented, assuming design problems, as noted, could be resolved, the environmental impacts of this action would be less than with the proposed project. A State Historical Landmark listed on the National Register would be retained, not demolished. Construction and operational impacts would be similar to those described for the previous alternative.

C. ALTERNATIVE LOCATIONS FOR THE NEIMAN-MARCUS STORE

Neiman-Marcus has stated it wishes to retail in the Union Square shopping district of San Francisco. Although the company has not considered alternative locations to that proposed, several other locations have been identified by various citizens' groups. The area bounded by Market, Sutter, Powell, and Kearny is described as the retail core of San Francisco in the Commerce and Industry Element of the San Francisco Comprehensive Plan.[1] Possible alternative locations, suggested because of availability and/or proximity to the retail core, include the following: the H. Liebes-Ransohoff building at 255 Post (opposite Gumps), Livingston's on Grant Avenue at Geary (which may be available, as its lease is renegotiated every five years), and the Saks Fifth Avenue building on Grant Avenue at Maiden Lane. All of these buildings contain less than 70,000 square feet of available sales floor area. Because Neiman-Marcus has acquired the proposed project site, it is not considering an alternative location.

In testimony before the Landmarks Advisory Board,[2] Stanley Marcus stated:

> "Now, obviously, there are always alternatives. We had alternatives at the time we purchased the Union Square

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[1] San Francisco Department of City Planning, adopted by City Planning Commission Resolution No. 8001, 29 June 1978.

[2] Public Hearing, Landmarks Preservation Advisory Board, 5 June 1974.

> property. Coming into San Francisco we did not have to go to Union Square; we could have built out on Van Ness, or a number of places within the City. But, I'm not sure from the long-range interests of San Francisco itself, the retail market of the city, whether it would be beneficial to fractionalize the market. It would seem to me that the best interests of this community, as well as our own interests are one and the same. The building of a store five blocks away or ten blocks away could theoretically be successful. I don't think it would be as successful as it would be in Union Square; nor do I think that it would be to the best interest of the community to split the retail metropolitan business into several areas, with the resultant effect on taxable basis of a very healthy, solidly-concentrated retail community."

The Commerce and Industry Element of the Comprehensive Plan of San Francisco, in its Specific Objective 5 states, "Improve downtown San Francisco's position as a prime regional location for specialized retail trade." In addition, Policy #2 includes the following language: "Support the continued strength of high-quality specialty retail shopping facilities in the retail core." Alternative locations, outside the downtown area, would not conform to the Comprehensive Plan.

Construction on an alternate site would move all construction impacts to that site. Use of another existing building would move operation impacts to that site. Use of a building with less than 70,000 square feet when Carter Hawley Hale desires 175,000 square feet, would cut their revenue to less than half of that projected which could cause them to seek a site in another city. Use of another site would result in sale of the project site. Value of the present site could be affected by concern on the part of potential buyers over possible delays due to public concern over the fate of the City of Paris building.

D. ALTERNATIVE USES OF THE SITE

Prior to the current proposal, Neiman-Marcus had considered combining a Neiman-Marcus retail specialty store at the corner of Geary and Stockton streets with a tower structure containing a major hotel chain facility on the Geary-Grant corner of the block.

Environmental impacts resulting from this alternative development would differ from the proposed project impacts in several ways. In addition to the impacts associated with construction and operation of the retail store, there would be additional impacts from construction of a highrise tower and operation of a hotel with its associated activities.

Neiman-Marcus rejected this alternative because it appeared infeasible, economically, to establish a third large hotel operation on Union Square, presently the site of the St. Francis and Hyatt on Union Square hotels.

Several alternative occupancy schemes for the City of Paris building have been proposed by local preservation groups. One would include conversion of the existing building into a hotel space as, for example, the LeGrand Hotel in Mexico City. The LeGrand was a retail store, with a rotunda similar to that of the City of Paris, which was converted in the 1960s to a hotel with rooms opening onto the rotunda. If such an alternative were adopted, the City of Paris building would require remodeling, and the entire building would be required to be brought up to Code.

It has been suggested[1] that, if a Neiman-Marcus specialty store were not to open at the project site, the City of Paris building could be used for retailing in an economically feasible manner by leasing the first several floors to a specialty store and renting the remaining upper floors to boutique or other retailers. If no structural work were performed to implement this alternative, the City of Paris building would not have to be brought up to Code. With this alternative the 133-157 Geary Street building could be maintained for retail and office space, or replaced by a new structure.

E. ALTERNATIVE TO THE PROPOSED DESIGN

Policies in the Urban Design element of the Comprehensive Plan as applied to the site suggest an alternative facade design for the proposed Neiman-Marcus building which would more closely fit the street environment of Union Square. Such a design could share the primary characteristics of surrounding buildings, in order to provide visual features which would both reinforce space-defining qualities and visually anchor the southeast corner of Union Square. Such a design could include the proposed relocation of the City of Paris Rotunda at the Geary/Stockton corner.

Such an alternative design would display a pronounced cornice, a feature shared with many buildings along these streets, which would provide the sense of weight and mass necessary to define this corner of the Square. It would include the addition, at the ground level, of a number of windows or shallow display cases which would continue the use of a design element prevalent in this downtown shopping area. The lower portion of the building facade would be delineated by a change in material, color or other design elements. Furthermore, an alternative design could incorporate a column at the corner of Stockton and Geary streets to more strongly define this important corner. This column would modify the scale of the corner opening, and would more sharply define the building envelope.

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[1] John Johnston, John Johnston, Inc., associated with Citizens' Committee to Save the City of Paris Building, meeting 8 September 1977.

CHAPTER VIII
THE RELATIONSHIP BETWEEN THE LOCAL SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

A. CUMULATIVE IMPACTS OF THE PROPOSED PROJECT

Construction of the Neiman-Marcus and the new Saks Fifth Avenue stores would have a cumulative impact on the Union Square area. The addition of these two stores would create adverse impacts such as increased demands on energy resources, public transportation systems, parking facilities, and there would be increased pedestrian traffic.

Architecturally, replacement of the City of Paris building on the southeast corner of Union Square and the replacement of the existing Fitzhugh building on its northwest corner would continue the general trend of altering the Beaux-Arts character of the area.

B. POTENTIAL OF THE PROPOSED PROJECT FOR REDUCING THE RANGE OF BENEFICIAL USES OF THE ENVIRONMENT

The proposed site and nearby areas, with the exception of Union Square, are presently used, primarily, for retail and hotel activities. While the proposed project would be compatible with surrounding land use, the City of Paris building would be irretrievably lost.

C. POTENTIAL OF THE PROPOSED PROJECT TO POSE LONG-TERM RISKS TO HEALTH AND SAFETY

The new building would be constructed in accordance with San Francisco City Codes, and would incorporate the latest techniques for seismic safety design and fire prevention. Potential hazards related to preservation of the Rotunda would be minimized by special, reinforced construction designed to ensure the maximum safety of people using the building. No measures have been developed to date to secure the art glass dome in case of an earthquake. A resolution of this problem must be accomplished prior to implementation of the proposed project, in order to ensure the safety of customers and personnel in the building.

D. COMPARISON OF USE OF THE SITE NOW, WITH ITS RESERVATION FOR ALTERNATIVE, FUTURE USE

Use of the site for the proposed project would commit the site to the design, height and character of the proposed Neiman-Marcus store. Inherent in this commitment of the site is the demolition of the existing City of Paris building, considered by some to contain one of the great interior architectural spaces in San Francisco. Reservation of the site for future, alternative use would temporarily preclude demolition of the City of Paris building, and could allow for eventual re-use of this existing building.

Demolition of the present building at a later date would entail increased construction costs, and revenues to property owners and the City would be postponed.

CHAPTER IX
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CHAPTER XI
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APPENDIX A

TRANSPORTATION ANALYSIS

APPENDIX A

Transportation Analysis

1. Parking

In the immediate vicinity of the project site, metered parking spaces are available on sections of Geary Street between Grant and Stockton and on Stockton Street between Geary and O'Farrell. These spaces have a 30-minute limit, at a rate of five cents per six minutes, and are all unavailable between 4 p.m. and 6 p.m. due to tow-away zone restrictions. They also are unavailable between 7 a.m. and 1 p.m. when special loading zone restrictions apply, and the spaces are for use by trucks only. On the south side of Geary Street between Grant and Stockton, the special truck loading zone applies between 7 a.m. and 4 p.m.

There are eight metered parking spaces on the north side of Geary between Grant and Stockton, and four metered spaces on the south side. The meters are located nearer Grant than Stockton. On Stockton between Geary and O'Farrell, there are eight metered spaces, six near the intersection with Geary and two near the intersection with O'Farrell.

The curb lanes on Stockton between Post and O'Farrell and on Geary between Grant and Stockton are all tow-away lanes between 4 p.m. and 6 p.m. During these hours the curb lane on the north side of Geary is a bus-only lane. During recent observations[1] by the EIR traffic consultant these lanes were generally clear of stationary traffic during these hours. Violations were observed on Stockton (east side) between Post and Geary, with an average of three vehicles parked in the tow-away lane, and on Stockton (west side) between Geary and O'Farrell with an average of two vehicles parked in the tow-away lane.

2. Pedestrian Conditions

On Friday, 12 August 1977, pedestrian counts were taken (by Alan M. Voorhees & Associates) on Stockton and Geary streets between 11:45 a.m. and 3:30 p.m. Table A-1, page 118, shows the 15-minute and peak 5-minute pedestrian volumes counted at mid-block and at the pedestrian crossings, on Stockton and Geary streets. Peak 5-minute volumes have been converted into pedestrian flows per minute and per 3.28 feet (1 meter) of width, for subsequent use

---

[1] Tuesday, 12 September 1978

TABLE A-1

Pedestrian Counts
undertaken on Friday, August 12, 1977

Location	Count Period	15-Minute Pedestrian Volume[1]	Highest 5-Minute Volume[1]	Peak 5-Minute		Directional Split EB/WB or NB/SB
				Flow Density[2]	L.O.S.[3]	
Stockton Street	12:00-12:15	365	138	14	A	41/59
East Side, Midblock	12:35-12:50	526	226	23	B	57/43
Between Geary &	1:10- 1:25	526	215	22	B	53/47
O'Farrell	1:45- 2:00	483	200	20	B	56/44
	2:50- 3:05	410	145	15	A	50/50
Stockton Street	12:20-12:35	532	211[4]	38	C	49/51
Pedestrian	12:55- 1:10	559	230[4]	41	C	43/57
Crossing at	1:30- 1:45	528	227	41	C	49/51
Geary Southside	2:05- 2:30	467	184	33	C	39/61
	3:05- 3:20	434	214	39	C	53/47
Geary Street	12:00-12:15	235	92	6	A	54/46
Southside, Midblock	12:35-12:50	391	170	11	A	55/45
Between Stockton	1:10- 1:25	422	161	10	A	52/48
& Grant	1:45- 2:00	386	143	9	A	61/39
	2:50- 3:05	334	131	8	A	55/45
Geary Street	12:20-12:35	668	245	44	C	47/53
Pedestrian	12:55- 1:10	653	251	45	C	52/48
Crossing at	1:30- 1:45	597	328	59	D	52/48
Stockton Eastside	2:05- 2:20	633	222	40	C	50/50
	3:10- 3:25	628	241	43	C	49/51

---

[1] Total pedestrians for both directions

[2] Pedestrians per minute per meter width (or per 3.28 feet width)

[3] Level of Service, see Table A-2, next page, for definitions. Sources: Oeding, D., "Travel Flows and Design of Pedestrians Walkways and other Pedestrian Facilities Research Report 22," Roadway Construction and Traffic Engineering Department, Ministry of Transportation, Bonn, W. Germany 1963; Fruin, J., Pedestrian Planning and Design, Metropolitan Association of Urban Designers and Environmental Planners, New York, 1971.

[4] Estimated

TABLE A-2

Pedestrian Levels of Service Definitions[1]

Level of Service	Service[2] Volume	Description
A	< 20	Favorable conditions, with freedom of movement, easy circulation and few conflicts with opposing and intersecting pedestrian flows.
B	20-30	Favorable conditions for opposing flows, but for intersecting flows the conditions are more restricted and dense; conflicts occur, but remain acceptable.
C	30-50	Average conditions, movements are restricted and circulation is dense. Conflicts occur, but are tolerable.
D	50-70	Average conditions for opposing flows, constriction of movement and tolerable conflicts. The conflicts with intersecting flows become restricted and sometimes intolerable.
E	70-80	Reduced walking speed, difficult circulation and little freedom of movement. Conflicts with both opposing and intersecting flows are numerous and often intolerable.
F	> 80	Unstable conditions; pedestrian speed, densities and conflicts become intolerable.

---

[1] Source: Fruin J., Pedestrian Planning and Design, Metropolitan Association of Urban Designers and Environmental Planners, New York, 1971.

[2] Pedestrians/minute/3.28 feet (1 meter).

as criteria for level of service for pedestrian circulation.[1] The flower stand at the southeast corner of Stockton and Geary reduces the absolute sidewalk width from 16 feet (5 meters) to an effective[2] width of 6.5 feet (2 meters). Similarly, the lamp post and newsstand on Geary near the southeast corner of Stockton reduce the absolute width of the sidewalk there from 16.9 feet (5.2 meters) to an effective width of 10.6 feet (3.2 meters). The pedestrian flow densities shown in Table A-1 are based on the effective widths for these locations.

Table A-1, page 118, shows the estimated levels of service as an average for the five-minute period counted, and Table A-2, page 119, explains levels of service.

Pedestrian levels of service defined in Table A-2 are designated A through F. These designations are thus the same as those used for traffic levels of service (see page 119).

Table A-1 shows that the pedestrian levels of service on the sidewalks were generally good, that is A or B. At the pedestrian crosswalks levels of service were C or D, based on the 25% green traffic light-time for pedestrians. However, pedestrians use more than 25% of the allowable green time, generally crossing during the whole green phase of the parallel vehicular traffic movement (about 45% of the total signal cycle is green time). This "illegal" crossing improves the level of service of the pedestrian crossing to B or C. Only for the Stockton Street crossing on the south side of Geary does this "illegal" crossing present any conflicts with vehicles (those turning left from Geary).

The above figures and levels of service are based on five-minute totals and do not reflect variations and irregular flow pattern within a five-minute period. Local observations indicated that these pedestrian flows were fairly irregular and that at certain times conditions became less free-flowing and the movements more restricted. These movements were counter-balanced, however, by periods when the sidewalk was practically empty. These gaps may reflect the signal wait time for pedestrians.

3. Transportation Impacts of Proposed Project

a. Framework of Travel Impact Analysis

The travel impacts of the proposed project are analyzed at two different geographical levels. One addresses travel impacts immediately adjacent to the proposed project, that is, impacts which would be caused by additional pedestrians on the sidewalks next to the building. The other level includes impacts on all travel modes on an areawide scale. For areawide travel impacts, the different travel modes of entry to downtown San Francisco are analyzed.

---

[1] Fruin, J., Pedestrian Planning and Design, Metropolitan Association of Urban Designers and Environmental Planners, New York, 1971.

[2] Effective width is the amount of sidewalk available for pedestrian use.

The additional, expected travel volumes with the proposed project are compared with the existing conditions at the site.

b. Travel Generation of Proposed Project

Two surveys, by Alan M. Voorhees and Associates, estimate the amount of travel expected to be generated by the proposed project. The first, designed to obtain the total travel generation, involved a count of all persons entering and leaving I Magnin, a department store similar to the proposed store and located on the southwest corner of Stockton and Geary. This survey indicated a Friday peak-hour generation rate of 2,130 person trips (total for both directions) with about 645 persons during the peak 15-minutes.[1] This corresponds to a peak-hour generation rate of 13 persons per 1,000 square feet of sales area, and to a peak 15-minute generation rate of four persons per 1,000 square feet of sales area.[2] Assuming that an average day's peak-hour trips constitute 20% of daily trips, the daily trip generation rate for an average Friday is estimated at 65 persons per 1,000 square feet. To represent a worst-case condition, such as the Friday after Thanksgiving, the observed peak generation rates are assumed to increase by 50%. The worst case person-trip generation rates assumed for the proposed project are thus 20 persons during the peak-hour and six persons during the peak 15 minutes, per 1,000 square feet. Assuming that on peak days peak-hour trips constitute 18% of daily trips--the peak is more spread out on peak days--a daily trip-generation rate of 111 persons per 1,000 square feet of sales area is estimated for a peak shopping day.

The proposed project is estimated to include about 135,600 square feet of sales area. After subtracting the floor space of existing commercial facilities at the project site and correcting for the possibly lower travel generation rate of existing uses as compared to the proposed project, the following additional person volumes would be generated by the proposed project:

---

[1] Count taken on Friday, 26 August 1977, between 12:30 and 3:15 p.m. at all three entrances

[2] I. Magnin's sales area is estimated to be 142' x 150' (lot size) x 9 (selling floors) x 0.85 (efficiency factor) = 163,000 square feet (where efficiency factor represents the percentage of total floor space used for sales space).

	One-Way Person Trips	
	On an average Friday	On a peak Friday
For the whole day	7,800	13,320
For the peak hour	1,560	2,400
For the peak 15-minutes	480	720

These volumes compare to the estimated volumes at City of Paris under full operation: 7,200 person trips for the whole day and 1,440 person trips in the peak hour for an average Friday, and 12,295 daily person trips and 2,215 peak hour person trips for a peak Friday.

The second survey was designed to obtain travel behavior information of persons shopping at I. Magnin. Shoppers were asked about their travel origin, mode of travel and the number of major stores visited. Table A-3, page 123, summarizes the results of this survey and shows that about 59% of the shoppers' travel origins were in the City and County of San Francisco. This figure includes San Francisco residents, persons employed in San Francisco shopping during their lunch break, and tourists staying in San Francisco. About 43.5% of the shoppers arrive in downtown San Francisco by car (35% driving and 8.5% passengers), 24% walked, 26.5% used public transit and the remaining 6% came by taxis or other modes. The survey also indicated that, on the average, shoppers visited four major stores.

Table A-4, page 124, shows the number of one-way trips generated by the proposed project in the major travel modes. Because many of the future Neiman-Marcus shoppers would shop in downtown San Francisco even if Neiman-Marcus were not built, there is a difference between the total number of trips generated by the store if it were isolated and the number of additional trips into downtown San Francisco generated by the store. As each shopper visits an average of four stores, the assumption is made that only one out of four visitors (25%) can be assigned to the new project. This assumption tends to over estimate the proportion of additional visitors, as it assumes that the incremental land uses attract additional visitors at the same rate as the existing land uses. It has generally been shown[1] that as shopping centers or commercial

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[1] Institute of Transportation Engineers, Trip Generation, 1976.

TABLE A-3

Survey Results of I. Magnin Shoppers

		Persons	Percent
Place of Origin:	San Francisco County	109	59.0
	Downtown San Francisco	65	35.0
	San Mateo County	19	10.0
	Marin County	17	9.0
	Alameda County	15	8.0
	Contra Costa County	8	4.5
	Santa Clara County	6	3.0
	Other	12	6.5
Mode of Travel:	Auto Drivers	65	35.0
	Auto Passengers (car pooling)	16	8.5
	Walk	45	24.0
	MUNI Coaches	29	16.0
	MUNI Cable Car	4	2.0
	BART	8	4.0
	Other Buses (SamTrans, A.C.)	7	4.0
	Taxi	9	5.0
	S.P. Trains	1	0.5
	Other	2	1.0

Average Number of Major Stores Visited: 4.

Note: Interviews were done on Friday, 26 August (12:30-3:30 p.m.) and Friday, 15 September (11:30 a.m.-2:30 p.m.) 1977, and involved a total sample of 186.

TABLE A-4

Estimated Total One-Way Trips and Additional Daily Trips Generated by Proposed Project

	Total Trips Generated		Additional Trips Generated	
	Average Friday	Peak Friday	Average Friday	Peak Friday
Auto Trips	2,730	4,660	680	1,160
Taxi Trips	390	670	100	170
Total Vehicle Trips	3,120	5,330	780	1,330
Auto Passengers	660	1,130	160	280
Muni Person Trips	1,250	2,130	310	530
Cable Car Trips	160	270	40	70
BART Person Trips	310	530	80	130
Other Buses (SamTrans, A.C. Transit)	310	530	80	130
Southern Pacific Person Trips	40	70	10	20
Walk Trips	1,870	3,190	470	800
Other Modes	80	140	20	40
TOTAL	7,800	13,320	1,950	3,330

districts expand, the travel generation rates decrease. In Table 4 it is assumed that the additional trips generated into downtown San Francisco represent about 25% of the total trips visiting the proposed project.

The Environmental Impact Report[1] for the proposed Saks Fifth Avenue store (to be located on the northeast corner of Post and Powell streets, on the northwest corner of Union Square), estimated that the Saks store would generate a total of 7,000 one-way person trips[2] per working day. The Saks Fifth Avenue EIR also estimates that the ground floor retail area of the existing Fitzhugh building generates an average of 1,800 to 2,400 one-way shopping trips,[3] and that about 50 employees work in the existing building.[4] Assuming an average of four one-way trips per employee, the total number of one-way trips currently generated by the Fitzhugh building is estimated at 2,000 to 2,600 per average day. The additional one-way trips generated by the Saks Fifth Avenue project at the Fitzhugh building site would thus be 4,400 to 5,000 one-way person trips. Assuming that one out of four of these trips represents an additional one-way trip to or from the Union Square shopping area, the additional one-way trips generated by the Saks Fifth Avenue project would be between 1,100 and 1,250 trips per average day. This represents about 56% to 64% of the additional 1,950 one-way trips generated by the proposed Neiman-Marcus project.

c. Pedestrian Impacts in Immediate Vicinity

Pedestrian impacts are expected to be greatest on the sidewalks adjacent to the proposed store and on the pedestrian crossings at Stockton and Geary streets. Shoppers leaving any of the Neiman-Marcus entrances would be distributed among:

1) Stockton Street sidewalk, east side
2) Stockton Street crosswalk on south side of Geary Street
3) Geary Street sidewalk, south side
4) Geary Street crosswalk on east side of Stockton

No information is available on the proportional distribution among these four crosswalks and sidewalks. For the purposes of this analysis it is assumed that not more than one-third of the shoppers would select any one direction; pedestrian impacts are evaluated on the basis of one-third of the shoppers being assigned to each of the four directions. The analysis is for the peak 5 minute period of an average Friday and of a peak Friday. Based on the pedestrian counts near the project site (see Table A-1, page 118), it is estimated that the peak 5-minute pedestrian flow generated by the store would represent 40% of the peak 15-minute flow. The pedestrian counts taken on Friday, 12 August 1977 (Table A-1, page 118), are assumed to be representative for nonproject pedestrian volumes on an average Friday. These volumes have been increased by 30% to represent the higher pedestrian volumes of a peak Friday.[1]

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[1] City of San Francisco, Final EIR, EE74-286, Saks Fifth Avenue, Union Square Project, certified 16 March, 1978.

[2] Ibid., Section IV D, p. 38, Table 1.

[3] Ibid., Section III A, p. 15.

[4] Ibid., Section IV B, p. 34.

Table A-5, page 127, shows the pedestrian densities and levels of service that can be expected with and without the Neiman-Marcus store. The pedestrian volumes and levels of service at the four critical sections worsen by about 20% to 43%.

The pedestrian crossings of Geary and Stockton streets show the worst resulting conditions: levels of service D or D/E on an average Friday and levels of service D/E or F on a peak Friday. Level of service D means (Table A-2, page 119) that walking speeds are average, that there are some restrictions of movement, and that there are conflicts with opposing traffic. The conflicts with opposing traffic are sometimes intolerable. The conflicts with perpendicular, intersecting pedestrian traffic, however, become restricted and sometimes intolerable. Under level of service F conditions, pedestrian speed, densities and conflict become intolerable. The above conditions are estimated on the basis of the legally allowable green time and crossing width. In reality, both the green time and the crossing width are exceeded, so that the actual levels of service for pedestrians are better (B/C and C crossing Stockton and Geary streets respectively on an average Friday, and C and D respectively on a peak Friday) than the estimations.

The pedestrian sidewalks adjacent to the proposed project would operate at better levels of service than the crosswalks. On an average Friday and with the proposed project they would operate at levels of service B on Stockton and A on Geary. The Stockton Street sidewalk has slightly worse pedestrian conditions than the Geary Street sidewalk because of the flower stand, which reduces its effective width. On a peak Friday the conditions on the Stockton Street sidewalk near the flower stand would be at level of service C, representing dense and restricted movements with numerous but tolerable conflicts.

The above conditions describe 5-minute peak periods occurring on average and peak Fridays, and these conditions might recur occasionally during a few hours between 11:30 a.m. and 3:30 p.m. on the respective Fridays and there would be variations within the 5-minute periods.

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[1] It is assumed that general sidewalk pedestrian flows increase less on a peak Friday than the 50% increase estimated for "shopping" pedestrians.

TABLE A-5

Impacts on Pedestrian Flows

		Without Neiman-Marcus			With Neiman-Marcus			
	Location	5-Minute Volume	Flow Density	Pedestrian Level of Service[2]	5-Minute Volume	Flow Density	Pedestrian Level of Service[2]	Increase Due to Project
On an Average Friday	Stockton Street Sidewalk	226	23	B	290	29	B	+28%
	Pedestrian Crossing of Stockton Street	230	41	C	294	53	D	+28%
	Geary Street Sidewalk	170	11	A	234	15	A	+38%
	Pedestrian Crossing of Geary Street	328	59	D	392	70	D/E	+20%
On a Peak Friday	Stockton Street Sidewalk	294	30	B/C	390	39	C	+33%
	Pedestrian Crossing of Stockton Street	299	54	D	395	71	D/E	+32%
	Geary Street Sidewalk	221	14	A	317	20	A/B	+43%
	Pedestrian Crossing of Geary Street	426	76	E	522	93	F	+23%

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[1] Pedestrians per minute per 3.28 feet (1 meter) width.

[2] See Table 2, this Appendix, for pedestrian level of service definitions.

Pedestrian conditions would tend to be at their worst at the southeast corner of Geary Street and Stockton Street, where the main entrance to the proposed project would be and where pedestrians would accumulate while waiting for the green light at the crossings. This corner congestion would be somewhat offset by the proposed building design, which would replace the existing sharp corner of the City of Paris building. The new design would widen the effective width of the sidewalk corner by about 7 feet.

It is concluded that with or without the project, the pedestrian densities would be most critical at the crossings and near the flower stand on Stockton Street, and that the proposed project would generate enough pedestrians to worsen the levels of service to a noticeable degree. This would be the case especially on peak shopping days.

d. Impacts on Vehicular Traffic

Table A-4 indicated that an estimated 780 additional vehicle trips would be generated by the proposed project on an average Friday and about 1,330 additional trips on a peak Friday. This traffic increase, including taxi trips, would be added to the traffic entering and leaving the downtown shopping area, which consists of approximately 40 blocks. No precise assignment can be made of these traffic increases because of uncertainties regarding their entry points to the downtown area and the specific destinations of the vehicles. The additional traffic would be distributed over a large number of downtown streets.

Assuming that all 1,330 additional daily vehicle trips generated by the proposed project on a peak Friday (665 coming and 665 going) would end and start at the Union Square Garage--which is unlikely, especially on a peak Friday--and assuming that the 665 vehicles would be equally divided between Geary Street and Stockton Street approaching the Geary and Stockton intersection--the most critical link--the increase in daily traffic due to the project would be about 2-3%. Such an increase would be within the error of the prediction methods.

The above numbers do not include the vehicle trips generated by the employees of the proposed project. The number of employees is estimated at a total of 450 working on average days and 550 on peak days. About 60% of these employees would be sales people, 30% would be clerical employees, and 10% would be management staff. Not all these employees would be in the store at any one time of the day. No specific information is known on the travel behavior and travel origins of these potential employees. Based on an employee survey at Levi-Strauss headquarters in the Embarcadero

Center in downtown San Francisco[1], it is estimated that, at most, 16% of the Neiman-Marcus employees would drive their car to work. This would represent about 150 one-way vehicle trips on an average day and about 180 one-way vehicle trips on a peak day. It is unlikely that any of these employees would park in the immediate vicinity of the proposed site. It is expected that most of these employees would seek less expensive parking south of Market Street. As these trips would originate from a wide variety of locations, the impact would be spread over many San Francisco city streets. The impacts on specific streets thus would not be measurable.

The remaining employee trips (about 760 one-way trips on an average day and about 930 one-way trips on a peak day) would use a variety of modes. Under worst-case conditions (assuming all trips were made on MUNI services), these additional trips would represent an increase of about 2.5% on an average day and 3% on a peak day in the morning peak period (7 a.m. to 9 a.m.) on all streetcars and on the following routes: 1, 2, 3, 30, 30x, 38 and 45.[2] During these hours, the transit system has capacity available to accommodate those trips.

Assuming that many of the employees would remain in the store until at least a 6 p.m. closing time, the additional trips in the evening (between 5 p.m. and 7 p.m.) would represent a worst case impact of about 3% on an average day and 3.5% on a peak day of ridership on all streetcars and on the following routes: 1, 2, 3, 30, 30x, 38 and 45.[2,3]

e. Impacts on Parking

The survey undertaken by AMV indicated that about 83% of the vehicles generated by I. Magnin parked within two blocks of Union Square (an area up to 25 blocks). Many of these vehicles park in the Union Square Garage. A similar pattern is expected for the additional vehicles attracted by the proposed project, i.e., the 340 additional vehicles (excluding taxis) on an average Friday and the 580 additional vehicles on a peak Friday. Assuming that the parking space requirement represents about 67% of the vehicles (representing an average turnover rate of 1.5)[1], the parking demand in the Union Square shopping area would increase by about 230 spaces on an average Friday and by about 340 spaces on a peak Friday.[2] This increase would be more than the reserve capacity, estimated at 225 spaces, that is currently available on average Fridays in the Union Square Garage and in the Ellis-O'Farrell Garage. The proposed project would tend to use up the reserve capacity available in the most centrally located and the least expensively priced parking facilities. On peak days, when the most central garages are already fully occupied, the additional parking demand would be satisfied in more distant parking facilities. The direct effect of this additional demand for parking would be that shoppers in the Union Square shopping area, on the average, would have to park further away (about one block) from the central shopping area, with the proposed project. It is expected that most of the excess parking demand caused by the Neiman-Marcus project would have to be satisfied in the south of Market area.

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[1] Survey by Levi-Strauss among 46% of its 1,200 employees located in the Embarcadero Center, June 1977.

[2] Source: San Francisco MUNI: Report of Traffic Checks Volume Counts for Fiscal Year Ending June 30, 1976. No counts were included for routes 38x or 85, the Shopper Shuttle.

[3] No capacity figures available for 5 p.m. - 7 p.m.

In the long range, the increased parking deficiencies in the most central areas and the potential parking cost increases would probably make people shift to other transportation modes or to other destinations where parking would be more convenient.

f. Impacts on Transit

Between 310 and 530 additional person-trips would be generated on the MUNI buses and coaches on a Friday. These additional rides would be distributed over all the routes serving the Union Square shopping area, including the streetcars on Market Street. If all these additional riders entered the downtown area between 10 a.m. and 2 p.m. they would represent about 1.6% of the 10 a.m. to 2 p.m. ridership on all streetcars and on the following routes: 1, 2, 3, 30, 30x, 38, and 45.[3] Most of the ridership increases would occur at off-peak periods when the transit system operated below its capacity.

The estimated additional number of riders on the cable cars would be 40-60 for a Friday, and would occur at those periods when cable cars are most heavily overloaded. The additional demand would represent about one-half of the maximum capacity of one cable car. Waiting times for a place on the cable cars would increase.

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[1] This is a conservative assumption. The Sutter-Stockton Garage has an average turnover rate of 2.5 vehicles per space per day.

[2] Adding the additional trips estimated to be generated by the proposed Saks Fifth Avenue store would represent a cumulative parking demand at about 297 spaces on an average day.

[3] Source: San Francisco MUNI: Report of Traffic Checks Volume Counts for Fiscal Year Ending June 30, 1976. No counts were included for routes 38x and 85, the shopper shuttle.

g. Loading and Unloading

Most freight material would be delivered at a trucking dock that connects directly to the basement. This dock would be accessible from O'Farrell Street through Security Pacific Plaza and is adjacent to the Liberty House loading docks. Traffic on this section of O'Farrell Street is relatively light (at about 25% to 35% of its capacity during the noon peak hour) and would not be affected by the additional trucks.

Although the frequency of freight deliveries would vary, the developer estimates an average of six to ten deliveries a day, most of which would occur between 7:30 a.m. and 9 a.m. No deliveries would be received after 2:30 p.m.

ADDENDUM TO APPENDIX A

Office of Environmental Review
Department of City Planning

13 April 1977

Standard Definitions

TRAFFIC: LEVELS OF SERVICE*

Level of service A describes a condition of free flow, with low volumes and high speeds. Traffic density is low, with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay.

Level of service B is in the zone of stable flow, with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable, with a low probability of traffic flow being restricted. The lower limit (lowest speed, highest volume) of this level of service has been associated with service volumes used in the design of rural highways.

Level of service C is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained, with service volumes perhaps suitable for urban design practice.

Level of service D approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Drivers have little freedom to maneuver, and comfort and convenience are low, but conditions can be tolerated for short periods of time.

Level of service E cannot be described by speed alone, but represents operations at even lower operating speeds than in level D, with volumes at or near the capacity of the highway. Flow is unstable, and there may be stoppages of momentary duration.

Level of service F describes forced flow operation at low speeds, where volumes are below capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of the downstream congestion. In the extreme, both speed and volume can drop to zero.

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* Derived from: Highway Research Board, Highway Capacity Manual, Spec. Rpt. No. 87, 1965.

APPENDIX B

NOISE

APPENDIX B

Noise

Part I of this Appendix provides background information to aid in understanding the technical aspects of the noise sections. Part II discusses the noise measurement survey conducted for this report.

I. Fundamentals of Environmental Noise

Three dimensions of environmental noise are important in determining subjective response. These are:

1) the intensity or level of the sound;
2) the frequency spectrum of the sound; and
3) the time-varying character of the sound.

Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing.

The "frequency" of a sound refers to the number of complete pressure fluctuations per second in the sound. The unit of measurement is the cycle per second (cps) or Hertz (Hz). Most of the sounds which we hear in the environment do not consist of a single frequency, but of a broad band of frequencies, differing in level. The quantitative expression of the frequency and level content of a sound is its sound spectrum. A sound spectrum for engineering purposes is typically described in terms of octave bands which separate the audible frequency range (for human beings, from about 20 to 20,000 Hz) into nine segments.

Many rating methods have been devised to permit comparisons of sounds having quite different spectra. Fortunately, the simplest method correlates with human response practically as well as the more complex methods (Parkin 1964, Hillquist 1967, Galloway *et al*. 1969, Botsford 1969). This method consists of evaluating all of the content of a sound in accordance with a weighting that progressively and severely de-emphasizes the importance of frequency components below 1000 Hz, with mild de-emphasis above 5,000 Hz. This type of frequency weighting reflects the fact that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency midrange. The weighting curve most often used is called "A" weighting, and the level so measured is called the "A-weighted sound level," or simply "A-level."

The A-level in decibels is expressed "dBA"; the appended letter "A" is a reminder of the particular kind of weighting used for the measurement. In practice, the A-level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. All U.S. and international standard sound level meters include such a filter. Typical A-levels measured in the environment and in industry are shown in Table B-1, page 137.

Although the A-level may adequately describe environmental noise at any instant in time, the fact is that the community noise level varies continuously. Most environmental noise includes a conglomeration of distant noise sources which creates a relatively steady background noise in which no particular source is identifiable. These distant sources may include traffic, wind in trees, industrial activities, etc. These noise sources are relatively constant from moment to moment, but vary slowly from hour to hour as natural forces change or as human activity follows its daily cycle. Superimposed on this slowly varying background is a succession of identifiable noisy events of brief duration. These may include nearby activities or single-vehicle passages, aircraft flyovers, etc., which cause the environmental noise level to vary from instant to instant.

To describe the time-varying character of environmental noise, the statistical noise descriptors L_{10}, L50, and L90 are commonly used (Kittelson et al. 1964, Griffiths et al. 1968, Olson 1970, Scholes 1970, Gordon et al. 1971). The L_{10}, as used in this report, is the A-weighted sound level equaled or exceeded during 10 percent of a stated time period. The L_{10} is considered a good measure of the "average peak" noise. The L_{50} is the A-weighted sound level that is equaled or exceeded 50 percent of a stated time period. The L_{50} represents the median sound level. The L_{90} is the A-weighted sound level equaled or exceeded during 90 percent of a stated time period. The L_{90} is used to describe the background noise.

In determining the daily measure of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However most household noise also decreases at night and exterior noises become very noticeable. Further, most people are sleeping at night and are very sensitive to noise intrusion.

To account for human sensitivity to nighttime noise levels a descriptor L_{dn} (day-night equivalent sound level) was developed. The L_{dn} divides the 24-hour day into the daytime of 7 a.m. to 10 p.m. and the nighttime of 10 p.m. to 7 a.m. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The L_{dn} then is the A-weighted average sound level in decibels

	Decibels A-Weighted	
CIVIL DEFENSE SIREN (100')	140	
JET TAKEOFF (200')	130	THRESHOLD OF PAIN
	120	
RIVETING MACHINE	110	ROCK MUSIC BAND
EMERGENCY ENGINE-GENERATOR (6') DC-10 FLYOVER (700')	100	PILE DRIVER (50')
BART TRAIN (20')	90	BOILER ROOM PRINTING PRESS PLANT
PNEUMATIC DRILL (50')	80	GARBAGE DISPOSAL IN HOME (3') INSIDE SPORTS CAR, 50 MPH
FREIGHT TRAIN (100') VACUUM CLEANER (10') SPEECH (1')	70	
	60	AUTO TRAFFIC NEAR FREEWAY LARGE STORE ACCOUNTING OFFICE
LARGE TRANSFORMER (200')	50	PRIVATE BUSINESS OFFICE LIGHT TRAFFIC (100') AVERAGE RESIDENCE
	35	MINIMUM LEVELS, RESIDENTIAL AREAS IN SAN FRANCISCO AT NIGHT
SOFT WHISPER (5')	30	
RUSTLING LEAVES	20	RECORDING STUDIO
	10	
THRESHOLD OF HEARING IN YOUTHS (1000-4000 Hz)	0	

NOTE: The distance (in feet) between the source and listener is shown in parenthesis.

Table B-1: TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND IN INDUSTRY during a 24-hour period with a 10 dB weighting applied to nighttime.

The effects of noise on people can be listed in three general categories:

1) subjective effects of annoyance, nuisance, dissatisfaction;
2) interference with activities such as speech, sleep, learning; and
3) physiological effects such as startle, hearing loss.

The sound levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Unfortunately, there is as yet no completely satisfactory measure of the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance, and habituation to noise over differing individual past experiences with noise (Stevens _et al_. 1955).

Thus, an important parameter in determining a person's subjective reaction to a new noise is the existing noise environment to which one has adapted: the so-called "ambient" noise. "Ambient" is defined in the San Francisco Noise Ordinance as "the all-encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far" (S.F. Municipal Code 1972). In general, the more a new noise exceeds the previously existing ambient, the less acceptable the new noise will be judged by the hearers (Galloway _et al_. 1969).

With regard to increases in noise level, knowledge of the following relationships will be helpful in understanding the quantitative sections of this report (Stevens _et al_. 1955, Beranek 1954):

a) Except in carefully controlled laboratory experiments, an increase of only one dB in A-level cannot be perceived.
b) Outside of the laboratory, a three-dB increase in A-level is considered a just-noticeable difference.
c) A change in A-level of at least five dB is required before any noticeable change in community response would be expected.
d) A ten dB increase in A-level is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response. Increases of more than 10 decibels would be expected to provoke complaints.

II. Noise Measurement Survey

Noise levels were measured at five locations near the project site. The peak noise levels generated by individual auto, truck and bus passbys were measured in the morning at each location using a hand-held sound level meter. During the afternoon and evening needle fluctuations of a hand-held sound level meter were observed, and the A-weighted sound level in decibels (dBA) was reported every ten seconds for periods of 10 to 15 minutes at each location. The statistical descriptors L_{10}, L_{50}, and L_{90} (see Table 3, page 46) were calculated from these measurements. The location of the measurement positions are shown on Figure 21, page 47.

Measurement Location No. 1 was on the sidewalk of the southeast corner of the Stockton Street-Geary Street intersection, by the City of Paris Building about 23 feet from the near lane centerlines of Geary and Stockton. Morning noise levels were monitored from 7:20 a.m. to 7:35 a.m. San Francisco Municipal Railway (MUNI) buses generated the maximum levels. A diesel-powered General Motors Corporation (GMC) bus on Stockton Street generated a maximum level of 76 dBA. A similar GMC bus accelerating up Geary away from the intersection generated a maximum level of 86 dBA. A newer American Motors Corporation (AMC) diesel generated 77 dBA accelerating up Geary. Automobiles on Geary and Stockton Streets generated 66 dBA to 69 dBA controlling the average level. The minimum level measured was 58 dBA. Vehicular traffic was the only significant noise source during the afternoon and evening.

Measurement Location No. 2 was on the Geary Street sidewalk at the east boundary of the City of Paris Building about 23 feet from the near lane centerline. Morning noise levels were monitored from 7:50 a.m. to 8 a.m. On Stockton Street maximum noise levels were generated by a scavenger truck at 74 dBA, a GMC diesel MUNI bus at 73 dBA, a milk truck at 74 dBA, and a pickup truck at 72 dBA. A GMC diesel MUNI bus on Geary Street generated 71 dBA. Automobiles on Stockton Street generated 65 to 69 dBA, and electric MUNI buses about 67 dBA. Geary Street and O'Farrell Street automobiles were below 60 dBA. The minimum level was 59 dBA. During the morning measurement a truck was unloading merchandise across the street from the measurement location. The truck lift generated 62 dBA. Maximum levels of about 75 dBA were generated by the banging of dollies and clothing racks against the truck. Vehicular traffic was the only significant noise source during the afternoon and evening measurements.

Measurement Location No. 4 was in Union Square near the southeast corner of the first level above the street. Morning noise levels were monitored from 8:15 a.m. to 8:25 a.m. On Geary Street two GMC diesel MUNI buses generated 75 dBA and 76 dBA, and three trucks 71, 72, and 71 dBA. A GMC diesel MUNI bus and a Gray Line bus on Stockton Street each generated 72 dBA. Automobiles on Geary and Stockton Streets generated 64-65 dBA. The minimum level was 58 dBA in the absence of local traffic. Vehicular traffic was the only significant noise source during the afternoon and evening measurement. A barking dog was heard during the evening measurement.

Measurement Location No. 5 was in Union Square near the southeast corner of the top level. Morning noise levels were monitored from 8:25 a.m. to 8:35 a.m. Geary Street and Post Street buses generated 67-68 dBA, Powell Street buses generated 65-66 dBA, and Stockton Street buses generated about 63 dBA. The general traffic noise measured about 61-63 dBA. The minimum level measured was 59 dBA. During the afternoon a jet aircraft overflight and bells, sirens, whistles and horns were heard in addition to vehicular traffic.

Measurements were made with a Bruel & Kjaer (B&K) 2219 Sound Level Meter during the morning and afternoon and a B&K 2209 Sound Level Meter during the evening. The meters were calibrated before and after each measurement period. The meters were fitted with a windscreen. The sky was clear during all measurements. Winds were very light in the morning and moderate (about 5 to 8 mph) during the afternoon and evening.

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APPENDIX C

THE CHRISTMAS TREE

APPENDIX C[1]

The Christmas Tree

Every year in the month of May, a forester in the northwestern part of California was asked by City of Paris management to select a tree for the City of Paris building. Customarily, the tree was a Ponderosa pine. When a tree of adequate dimensions had been chosen it was marked "For City of Paris, San Francisco." In November it was cut down and loaded on its own flatbed truck, all of its branches tied together with rope so that it would not be damaged on its long trip, and brought to Union Square. At Union Square people would gather to welcome the tree when it arrived, usually around 6 p.m. after rush-hour traffic. The large doors were removed from the City of Paris entrance, and the tree was carried into the building trunk first. It took about 35 men to maneuver the 60 to 70-foot-tall tree into the Rotunda with the help of rods and tackle. If the tree in some places had empty areas, branches were slid into pre-drilled holes to make it as perfect as possible. When the tree was raised up on its revolving base, a scaffold was put up around it and the oversized ornaments were hung. It was then ready to be admired by Christmas shoppers, many of whom came into the City primarily to continue a long tradition of visiting the City of Paris Christmas tree.

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[1] This Appendix is based on information from Mr. Edward Bacon, former Security Supervisor in the City of Paris Building and Mr. George Trapp, Building Superintendent for I. Magnin.